Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSSPTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
```

NEWS 3 DEC 21 IPC search and display fields enhanced in CA/CAplus with the IPC reform

NEWS 4 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/ USPAT2

NEWS 5 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB

NEWS 6 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC

NEWS 7 JAN 17 Pre-1988 INPI data added to MARPAT

NEWS 8 JAN 17 IPC 8 in the WPI family of databases including WPIFV

NEWS 9 JAN 30 Saved answer limit increased

NEWS 10 JAN 31 Monthly current-awareness alert (SDI) frequency added to TULSA

NEWS 11 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results

NEWS 12 FEB 22 Status of current WO (PCT) information on STN

NEWS 13 FEB 22 The IPC thesaurus added to additional patent databases on STN

NEWS 14 FEB 22 Updates in EPFULL; IPC 8 enhancements added

NEWS 15 FEB 27 New STN AnaVist pricing effective March 1, 2006

NEWS 16 FEB 28 MEDLINE/LMEDLINE reload improves functionality

NEWS 17 FEB 28 TOXCENTER reloaded with enhancements

NEWS 18 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral property data

NEWS 19 MAR 01 INSPEC reloaded and enhanced

NEWS 20 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

NEWS 21 MAR 08 X.25 communication option no longer available after June 2006

NEWS 22 MAR 22 EMBASE is now updated on a daily basis

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT http://download.cas.org/express/v8.0-Discover/

NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific

10690708.trn

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 11:31:47 ON 24 MAR 2006

=> Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE Do you want to switch to the Registry File? Choice (Y/n):

Switching to the Registry File ...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:32:07 ON 24 MAR 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 MAR 2006 HIGHEST RN 877759-05-2 DICTIONARY FILE UPDATES: 22 MAR 2006 HIGHEST RN 877759-05-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

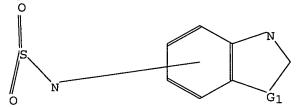
Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

10690708.trn

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10690708.str



/12 15 14

chain nodes : 11 12 13 14 ring nodes :

1 2 3 4 5 6

chain bonds :

11-12 12-13 12-14

ring bonds :

1-2 1-7 2-3 3-4 4-8 5-6 5-9 6-7 7-8 8-9

exact/norm bonds :

5-6 5-9 6-7 8-9 11-12 12-13 12-14

normalized bonds :

1-2 1-7 2-3 3-4 4-8 7-8

isolated ring systems :

containing 1 :

G1:0,S,CH2,NH

Match level :

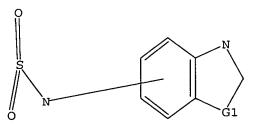
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS STR

L1



G1 O,S,CH2,NH

Structure attributes must be viewed using STN Express query preparation.

10690708.trn

Page 3

=> s 11

SAMPLE SEARCH INITIATED 11:32:22 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5065 TO ITERATE

39.5% PROCESSED 2000 ITERATIONS

26 ANSWERS

863_ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

105567

PROJECTED ITERATIONS: 97033 TO

PROJECTED ANSWERS: 830 TO 1802

L2 26 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 11:32:31 FILE 'REGISTRY'

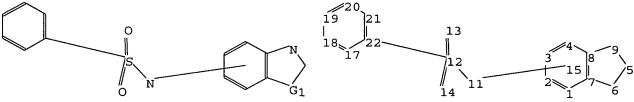
FULL SCREEN SEARCH COMPLETED - 103890 TO ITERATE

100.0% PROCESSED 103890 ITERATIONS

SEARCH TIME: 00.00.02

L3 863 SEA SSS FUL L1

Uploading C:\Program Files\Stnexp\Queries\10690708a.str



chain nodes : 11 12 13 14 ring nodes :

1 2 3 4 5 6 7 8 9 17 18 19 20 21 22

chain bonds :

11-12 12-13 12-14 12-22

ring bonds :

1-2 1-7 2-3 3-4 4-8 5-6 5-9 6-7 7-8 8-9 17-18 17-22 18-19 19-20 20-21

21-22

exact/norm bonds :

5-6 5-9 6-7 8-9 11-12 12-13 12-14 12-22

normalized bonds :

1-2 1-7 2-3 3-4 4-8 7-8 17-18 17-22 18-19 19-20 20-21 21-22

isolated ring systems :

containing 1 : 17 :

G1:0,S,CH2,NH

Match level :

10690708.trn

Page 4

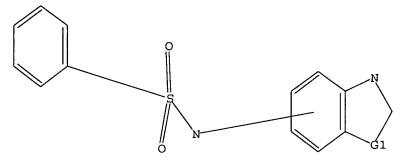
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom

L4 STRUCTURE UPLOADED

=> d 14

L4 HAS NO ANSWERS

L4 STR



G1 O,S,CH2,NH

Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 11:34:58 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3864 TO ITERATE

51.8% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

73552 TO 81008

PROJECTED ANSWERS:

149 TO 701

L5 11 SEA SSS SAM L4

=> s l4 sss full

FULL SEARCH INITIATED 11:35:05 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 79799 TO ITERATE

100.0% PROCESSED 79799 ITERATIONS

SEARCH TIME: 00.00.01

366 SEA SSS FUL L4

L6 =>

Uploading C:\Program Files\Stnexp\Queries\10690708b.str

10690708.trn

Page 5

11:48

11 ANSWERS

366 ANSWERS

chain nodes :
11 12 13 14
ring nodes :
1 2 3 4 5 6 7 8 9 17 18 19 20 21 22
chain bonds :
11-12 12-13 12-14 12-22
ring bonds :
1-2 1-7 2-3 3-4 4-8 5-6 5-9 6-7 7-8 8-9 17-18 17-22 18-19 19-20 20-21
 21-22
exact/norm bonds :
5-6 5-9 6-7 8-9 11-12 12-13 12-14 12-22
normalized bonds :
1-2 1-7 2-3 3-4 4-8 7-8 17-18 17-22 18-19 19-20 20-21 21-22
isolated ring systems :
containing 1 : 17 :

G1:0,S,CH2,NH

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom

L7 STRUCTURE UPLOADED

=> d 17 L7 HAS NO ANSWERS L7 STR

Structure attributes must be viewed using STN Express query preparation.

21 ANSWERS

732 ANSWERS

```
=> s 17
SAMPLE SEARCH INITIATED 11:37:24 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3864 TO ITERATE
```

51.8% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 73552 TO 81008 PROJECTED ANSWERS: 429 TO 1193

L8 21 SEA SSS SAM L7

=> s 17 sss full FULL SEARCH INITIATED 11:37:32 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 79799 TO ITERATE

100.0% PROCESSED 79799 ITERATIONS

SEARCH TIME: 00.00.01

L9 732 SEA SSS FUL L7

(FILE 'HOME' ENTERED AT 11:31:47 ON 24 MAR 2006)

FILE 'REGISTRY' ENTERED AT 11:32:07 ON 24 MAR 2006 L1 STRUCTURE UPLOADED 26 S L1 L2 L3863 S L1 SSS FULL STRUCTURE UPLOADED L4L5 11 S L4 L6 366 S L4 SSS FULL L7 STRUCTURE UPLOADED L8 21 S L7 732 S L7 SSS FULL

10690708.trn

Page 7

=> FIL HCAPLUS COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 503.46 503.67

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 11:37:43 ON 24 MAR 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 24 Mar 2006 VOL 144 ISS 14 FILE LAST UPDATED: 23 Mar 2006 (20060323/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 16 L10 94 L6 => s 19 L11 130 L9

=> FIL REGISTRY
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 10.12 513.79

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:40:22 ON 24 MAR 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 MAR 2006 HIGHEST RN 877759-05-2 DICTIONARY FILE UPDATES: 22 MAR 2006 HIGHEST RN 877759-05-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

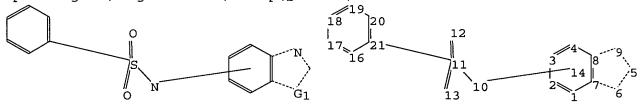
10690708.trn

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10690708c.str



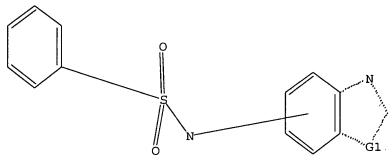
```
chain nodes :
10 11 12 13
ring nodes :
1 2 3 4
          5
            6 7 8 9 16 17
                               18
                                  19
                                       20
                                         21
chain bonds :
10-11 11-12 11-13
                  11-21
ring bonds :
                  4-8 5-6 5-9 6-7 7-8 8-9 16-17 16-21 17-18 18-19 19-20
1-2 1-7 2-3
             3-4
20-21
exact/norm bonds :
   5-9 6-7 8-9
                  10-11 11-12 11-13
                                    11-21
normalized bonds :
1-2 1-7 2-3 3-4
                  4-8 7-8 16-17 16-21 17-18 18-19 19-20
isolated ring systems :
containing 1 : 16 :
```

G1:0,S

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom

L12 STRUCTURE UPLOADED

=> d 112 L12 HAS NO ANSWERS L12 STR



G1 0,S

Structure attributes must be viewed using STN Express query preparation.

=> s 112

SAMPLE SEARCH INITIATED 11:40:46 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -739 TO ITERATE

100.0% PROCESSED 739 ITERATIONS

23 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

13150 TO 16410

PROJECTED ANSWERS:

173 TO 747

L13 23 SEA SSS SAM L12

=> s 112 sss full

FULL SEARCH INITIATED 11:40:53 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -15845 TO ITERATE

100.0% PROCESSED 15845 ITERATIONS 427 ANSWERS

SEARCH TIME: 00.00.01

427 SEA SSS FUL L12

='> FIL HCAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL

> ENTRY SESSION

FULL ESTIMATED COST 166.94 680.73

FILE 'HCAPLUS' ENTERED AT 11:41:05 ON 24 MAR 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is

10690708.trn

Page 10

held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 24 Mar 2006 VOL 144 ISS 14 FILE LAST UPDATED: 23 Mar 2006 (20060323/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 114 L15 59 L14

=> d his

(FILE 'HOME' ENTERED AT 11:31:47 ON 24 MAR 2006)

FILE 'REGISTRY' ENTERED AT 11:32:07 ON 24 MAR 2006 STRUCTURE UPLOADED L126 S L1 L2863 S L1 SSS FULL L3 STRUCTURE UPLOADED L4L5 11 S L4 366 S L4 SSS FULL <u>ე</u>L6 L7STRUCTURE UPLOADED L8 21 S L7 7L9 732 S L7 SSS FULL

FILE 'HCAPLUS' ENTERED AT 11:37:43 ON 24 MAR 2006

L11 130 S L9

FILE 'REGISTRY' ENTERED AT 11:40:22 ON 24 MAR 2006

L12 STRUCTURE UPLOADED L13 23 S L12

L14 427 S L12 SSS FULL

FILE 'HCAPLUS' ENTERED AT 11:41:05 ON 24 MAR 2006 L15 59 S.L14

=> s 115 and hsd 3308 HSD 310 HSDS 3434 HSD

(HSD OR HSDS)

L16 0 L15 AND HSD

=> s 110 and hsd 3308 HSD 310 HSDS 3434 HSD

(HSD OR HSDS)

10690708.trn

Page 11

```
03/24/2006
```

10690708.trn

1 L10 AND HSD L17

=> s lll and hsd

3308 HSD 310 HSDS

3434 HSD

L18

(HSD OR HSDS) 1 L11 AND HSD

=> s 110 and p/dt

5156577 P/DT

64 L10 AND P/DT L19

=> s lll and p/dt

5156577 P/DT

83 L11 AND P/DT L20

=> s 119 and py<=2002 22795059 PY<=2002

L21 55 L19 AND PY<=2002

=> s 120 and py<=2002

22795059 PY<=2002 68 L20 AND PY<=2002 L22

=> s 121 and us/pc

1520674 US/PC

25 L21 AND US/PC L23

=> s 122 and us/pc

1520674 US/PC

31 L22 AND US/PC L24

=> d l17 ibib abs hitstr tot

L17 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:588661 HCAPLUS

DOCUMENT NUMBER:

143:115445

TITLE:

Preparation of N-(pyridin-2-yl) benzenesulfonamides

and related compounds as inhibitors of $11-\beta$ -hydroxy steroid dehydrogenase type 1

 $(11-\beta-hsd-1)$ for the treatment of

diabetes and obesity

INVENTOR (S):

Edwards, Martin Paul; Johnson, Theodore Otto, Jr.; Nair, Sajiv Krishnan; Siu, Michael; Taylor, Wendy Dianne; Cripps, Stephan James; Wang, Yong; Cheng,

Hengmiao; Smith, Christopher Ronald

PATENT ASSIGNEE(S):

Pfizer Inc. USA SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005060963	A1	20050707	WO 2004-IB4056	20041206
WO 2005060963	C1	20051027		

10690708.trn

Page 12

```
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
                                CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
                     CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, F1, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
            NL 1027811
                                                                               20050621
                                                                                                            NL 2004-1027811
                                                                Α1
                                                                                                                                                                      20041217
            US 2005148631
                                                                A1
                                                                               20050707
                                                                                                            US 2004-16152
                                                                                                                                                                      20041217
PRIORITY APPLN. INFO.:
                                                                                                            US 2003-531186P
                                                                                                                                                              P 20031219
                                                                                                            US 2004-556921P
                                                                                                                                                              P 20040326
```

OTHER SOURCE(S):

MARPAT 143:115445

GI

$$\begin{array}{c|c}
 & W \\
 & N \\
 & N \\
 & R4 \\
 & R7 \\
 & R8
\end{array}$$

$$\begin{array}{c|c} \text{Me} & \text{O2} & \text{OEt} \\ \text{N} & \text{N} & \text{OEt} \end{array}$$

AB The title compds. I [R1 = alkyl, (CR7R8)t(cycloalkyl), (CR7R8)t(aryl), and (CR7R8)t(4-10 membered heterocyclyl); b = 1-2; n = 0-2; t = 0-5; T = 6-10membered heterocyclyl containing at least one nitrogen atom; W = C(O)NR2R3, C(0) OR2, alkyl, 5-membered heterocyclyl; R2-R6 = H, alkyl, (CR7R8)t(cycloalkyl), (CR7R8)t(aryl), and (CR7R8)t(4-10 membered heterocyclyl); or NR2R3 = 4-10 membered heterocyclyl; or R5 and R6 may optionally be taken together with the carbon to which they are attached to form cycloalkyl or heterocyclyl; R7, R8 = H, alkyl] which are $11-\beta$ hsd-1 inhibitors, and are therefore believed to be useful in the treatment of diabetes, obesity, glaucoma, osteoporosis, cognitive disorders, immune disorders, depression, hypertension, and metabolic diseases, were prepared Thus, reacting 3-chloro-2-methylbenzenesulfonyl chloride with Et (6-aminopyridin-2-yl)acetate afforded 75% II which showed 72% $11-\beta$ - hsd-1 inhibition at 0.1 μ M. The pharmaceutical composition comprising the compound I is disclosed.

IT 857290-03-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-(pyridin-2-yl) benzenesulfonamides and related compds. as inhibitors of 11- β -hydroxy steroid dehydrogenase type 1

(11- β - hsd-1) for the treatment of diabetes and obesity) RN 857290-03-0 HCAPLUS

10690708.trn

Page 13

CN [1,1'-Biphenyl]-4-sulfonamide, N-1H-benzimidazol-5-yl-4'-fluoro- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l18 ibib abs hitstr tot

ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:588661 HCAPLUS

DOCUMENT NUMBER:

143:115445

TITLE:

Preparation of N-(pyridin-2-yl) benzenesulfonamides

and related compounds as inhibitors of

 $11-\beta$ -hydroxy steroid dehydrogenase type 1 $(11-\beta$ - hsd-1) for the treatment of diabetes and obesity

INVENTOR(S):

Edwards, Martin Paul; Johnson, Theodore Otto, Jr.; Nair, Sajiv Krishnan; Siu, Michael; Taylor, Wendy Dianne; Cripps, Stephan James; Wang, Yong; Cheng,

Hengmiao; Smith, Christopher Ronald

PATENT ASSIGNEE(S):

SOURCE:

Pfizer Inc., USA

PCT Int. Appl., 114 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.						DATE		i	APPL	ICAT:							
WO.	2005	06096	 53		· Д1	-	2005			 WO 2	004-	 [B40]	 56	20041206				
	WO 2005060963								WO 2004-IB4056						20041200			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,	
							DE,											
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
							GR,											
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	
		MR,	ΝE,	SN,	TD,	TG												
	10278									NL 2	004-1	10278	311		2	00412	217	
US	2005	14863	31		A1		2005	0707	1	JS 2	004-3	16152	2		2	00412	217	
PRIORIT	PRIORITY APPLN. INFO.:								1	JS 2	003-5	53118	36P	P 20031219				
										JS 2	004-5	55692	21P	I	2 (00403	326	
OTHER SOURCE(S):					MARPAT 143:115445													

10690708.trn

Page 14

The title compds. I [R1 = alkyl, (CR7R8)t(cycloalkyl), (CR7R8)t(aryl), and AB (CR7R8)t(4-10 membered heterocyclyl); b = 1-2; n = 0-2; t = 0-5; T = 6-10membered heterocyclyl containing at least one nitrogen atom; W = C(O)NR2R3, C(0)OR2, alkyl, 5-membered heterocyclyl; R2-R6 = H, alkyl, (CR7R8)t(cycloalkyl), (CR7R8)t(aryl), and (CR7R8)t(4-10 membered heterocyclyl); or NR2R3 = 4-10 membered heterocyclyl; or R5 and R6 may optionally be taken together with the carbon to which they are attached to form cycloalkyl or heterocyclyl; R7, R8 = H, alkyl] which are $11-\beta$ hsd-1 inhibitors, and are therefore believed to be useful in the treatment of diabetes, obesity, glaucoma, osteoporosis, cognitive disorders, immune disorders, depression, hypertension, and metabolic diseases, were prepared Thus, reacting 3-chloro-2-methylbenzenesulfonyl chloride with Et (6-aminopyridin-2-yl)acetate afforded 75% II which showed 72% 11- β - hsd-1 inhibition at 0.1 μ M. The pharmaceutical composition comprising the compound I is disclosed.

ΙΙ

IT 857290-03-0P

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-(pyridin-2-yl) benzenesulfonamides and related compds. as inhibitors of $11\text{-}\beta\text{-hydroxy}$ steroid dehydrogenase type 1

 $(11-\beta-\text{hsd}-1)$ for the treatment of diabetes and obesity)

RN 857290-03-0 HCAPLUS

[1,1'-Biphenyl]-4-sulfonamide, N-1H-benzimidazol-5-yl-4'-fluoro- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 123 ibib abs hitstr 1-10

10690708.trn

Page 15

L23 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:150554 HCAPLUS

DOCUMENT NUMBER: 138:188073

TITLE: Preparation of dipeptide heterocyclic aromatic

compounds as growth hormone secretagogues

INVENTOR(S): Tino, Joseph A.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: U.S., 157 pp., Cont.-in-part of U.S. Ser. No. 506,749,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE					
				· -						
US 6525203	B1	20030225	US 2000-662448		20000914 <					
US 6518292	B1	20030211	US 2000-506749		20000218 <					
ZA 2001006854	Α	20021120	ZA 2001-6854		20010820 <					
US 6660760	B1	20031209	US 2002-282182		20021028 <					
US 2004002525	A1	20040101	US 2002-281818		20021028 <					
US 6969727	B2	20051129								
US 2004029935	A1	20040212	US 2002-281649		20021028 <					
US 6908938	B2	20050621								
US 2004072881	A1	20040415	US 2002-281848		20021028 <					
PRIORITY APPLN. INFO.:			US 1999-124131P	Р	19990312					
	-		US 1999-154919P	P	19990921					
			US 2000-506749	_	20000218					
			22 2000 200717	- 12	20000210					

OTHER SOURCE(S): MARPAT 138:188073

GΙ

AB R1R1aCXaNR6COYXb [R1 = (un)substituted alkyl, (hetero)aryl(alkyl), etc.;
R1a = H or (cyclo)alkyl; R6 = H, (cyclo)alkyl, alkenyl, aryl; Xa =
substituted 2-benzoxazolyl, 2-benzothiazolyl, or 2-benzimidazolyl; Xb =
(di)(alkyl)amino, (un)substituted imidazolyl; Y = phenylene,
(phenylene-interrupted)alkylene, (un)substituted alkylene, aza- or
oxaalkylene, or alkenylene] were prepared as growth hormone production and/or
release stimulants. Thus, dipeptide benzimidazole derivative I (Boc =
tert-butoxycarbonyl) was prepared by a multistep procedure starting from
Boc-D-Ser(CH2Ph)-OH, 4-nitro-o-phenylenediamine, Boc-methylalanine, and
MeSO2Cl.

IT 295335-10-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dipeptide heterocyclic aromatic compds. as growth hormone secretagogues)

RN 295335-10-3 HCAPLUS

CN Propanamide, 2-amino-2-methyl-N-[(1S)-2-(phenylmethoxy)-1-[5-[(phenylsulfonyl)amino]-1H-benzimidazol-2-yl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:657951 HCAPLUS

DOCUMENT NUMBER:

137:201300

TITLE:

Azoles, e.g., 1,3-benzothiazole and

[1,3]thiazolo[5,4-b]pyridine derivatives, as malonyl-CoA decarboxylase inhibitors, useful as

metabolic modulators

INVENTOR(S):

Arrhenius, Thomas; Cheng, Jie Fei; Wilson, Mark;

Serafimov, Rossy

PATENT ASSIGNEE(S):

Chugai Seiyaku Kabushiki Kaisha, Japan

SOURCE:

PCT Int. Appl., 66 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE		
WO 2002066035	A2 20020829	WO 2002-US4777	20020219 <		
WO 2002066035	A3 20021024				
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ	, CA, CH, CN,		
CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI, GB	, GD, GE, GH,		
GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KP, KR, KZ	, LC, LK, LR,		
LS, LT, LU,	LV, MA, MD, MG,	MK, MN, MW, MX, MZ, NO	, NZ, OM, PH,		
PL, PT, RO,	RU, SD, SE, SG,	SI, SK, SL, TJ, TM, TN	, TR, TT, TZ,		
UA, UG, US,	UZ, VN, YU, ZA,	ZM, ZW			
RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZM, ZW	, AT, BE, CH,		
CY, DE, DK,	'ES, FI, FR, GB,	GR, IE, IT, LU, MC, NL	, PT, SE, TR,		
BF, BJ, CF,	CG, CI, CM, GA,	GN, GQ, GW, ML, MR, NE	, SN, TD, TG		
CA 2437409	AA 20020829	CA 2002-2437409	20020219 <		
EP 1370260	A2 20031217	EP 2002-721032	20020219		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL	, SE, MC, PT,		
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR			
		BR 2002-7408	20020219		

CN 1492762	Α	20040428	CN 2002-805216	5	20020219
JP 2004522773	T2	20040729	JP 2002-565593	3	20020219
RU 2258706	C2	20050820	RU 2003-128307	7	20020219
NZ 526883	A	20051125	NZ 2002-526883	3	20020219
NO 2003003665	Α	20031020	NO 2003-3665		20030819
US 2004092503	A1	20040513	US 2003-468379)	20030819 <
PRIORITY APPLN. INFO.:			US 2001-270034	P P	20010220
			WO 2002-US477	7 W	20020219

OTHER SOURCE(S):

MARPAT 137:201300

GI

$$R^{1}$$
 C Y SH R^{6} II

$$^{\mathrm{F}3\mathrm{C}}$$
 $^{\mathrm{O}}$ $^{\mathrm{N}}$ $^{\mathrm{SH}}$ $^{\mathrm{SH}}$ $^{\mathrm{Me}}$ $^{\mathrm{III}}$

The invention relates to methods of treatment of certain metabolic AB diseases, and to novel compds. and their prodrugs, and/or pharmaceutically acceptable salts, and to pharmaceutical compns. containing such compds., useful in treating such diseases. In particular, the invention relates to the use of novel compds. and compns. for treatment of cardiovascular diseases, diabetes, cancers, acidosis, and obesity, through the inhibition of malonyl-CoA decarboxylase (MCD). The compds. have formulas I and II. In the case of I, Y = S or O; C = atoms to form substituted monocyclic 5to 7- membered ring fusion containing 1-3 heteroatoms (N/O/S); R1 and R2 are different, and each = H, halo, OH, NO2, cyano, (un) substituted alkyl or alkoxy, alkylamino, alkylsulfanyl, aryl, various functional groups and sidechains, or (un) substituted monocyclic 3- to 7-membered ring containing 0-3 heteroatoms (N/O/S). In the case of II, Y = S or O; R6 is placed at either the 5- or 6-position; R6 = phosphorylated amino, heterocyclic ring attached by (un) substituted NH, CO, or O, various acylated amino groups, sulfonylated amino groups, or cyclic amines; R7 = H, alkyl, alkoxy, halo, cyano, sulfonyl, aminosulfonyl; or R6R7 = fused substituted 5- to 7-membered ring containing 1-3 heteroatoms (N/O/S). Examples provided include explicit prepns. of seven compds. I and II, prepns. of several intermediates, and inhibition data for 10 compds. I and II. In addition, over 300 specific compds. I and II are claimed by name. For instance, reductive N-alkylation of 6-amino-1,3-benzothiazole-2-thiol using 2-methylpropanal and NaBH3CN (61%), followed by carbamoylation of the resultant secondary amine with α, α, α -trifluoro-p-tolyl isocyanate (64%) gave title compound III. This highly preferred compound

RN

CN

inhibited rat cardiac MCD in vitro with an IC50 of 0.031 µM.

IT 452104-11-9P, 4-Fluoro-N-isopropyl-N-(2-mercaptobenzothiazol-6-yl) benzenesulfonamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzothiazoles and thiazolopyridines as malonyl-CoA decarboxylase inhibitors, useful as metabolic modulators) 452104-11-9 HCAPLUS

Benzenesulfonamide, N-(2,3-dihydro-2-thioxo-6-benzothiazolyl)-4-fluoro-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

L23 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:353428 HCAPLUS

DOCUMENT NUMBER: 136:369603

TITLE: Preparation of (sulfonylamino) (aminomethylidene) indoli

nones as cell proliferation inhibitors.

INVENTOR(S): Walter, Rainer; Heckel, Armin; Roth, Gerald Juergen;

Kley, Joerg; Schnapp, Gisela; Lenter, Martin; Van Meel, Jacobus Constantinus Antonius; Spevak, Walter;

Weyer-Czernilofsky, Ulrike

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2002036564	A1 20020510	WO 2001-EP12523	20011030 <
		BA, BB, BG, BR, BY,	
		DZ, EC, EE, ES, FI,	
		JP, KE, KG, KP, KR,	
		MK, MN, MW, MX, MZ,	
PT, RO, RU,	SD, SE, SG, SI,	SK, SL, TJ, TM, TR,	TT, TZ, UA, UG,
US, UZ, VN,	YU, ZA, ZW, AM,	AZ, BY, KG, KZ, MD,	RU, TJ, TM
RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZW,	AT, BE, CH, CY,
DE, DK, ES,	FI, FR, GB, GR,	IE, IT, LU, MC, NL,	PT, SE, TR, BF,
BJ, CF, CG,	CI, CM, GA, GN,	GQ, GW, ML, MR, NE,	SN, TD, TG
DE 10054019	A1 20020523	DE 2000-10054019	20001101 <
AU 2002015980	A5 20020515	AU 2002-15980	20011030 <
EP 1341760	A1 20030910	EP 2001-992699	20011030
		GB, GR, IT, LI, LU,	
	LV, FI, RO, MK,		
		JP 2002-539324	20011030
US 2003069299		US 2001-2939	
US 6638965			
US 2004044222	A1 20040304	US 2003-646423	20030822 <

US 2004044053 A1 20040304 US 2003-646495 20030822 <-PRIORITY APPLN. INFO.:

DE 2000-10054019 A 20001101

US 2000-251055P P 20001201

WO 2001-EP12523 W 20011030

US 2001-2939 A3 20011101

OTHER SOURCE(S):

MARPAT 136:369603

Ι

GΙ

$$R^{2}SO_{2}NR^{6}$$
 $NR^{4}R^{5}$
 $NR^{4}R^{5}$

Title compds. [I; X = 0, S; R1 = H, alkoxycarbonyl, alkanoyl; R2 = (substituted) alkyl, alkenyl, Ph, heteroaryl, cycloalkyl, naphthyl, etc.; R3 = H, alkyl; R4 = (substituted) Ph, naphthyl, heteroaryl; R5, R6 = H, alkyl], were prepared Thus, 1-acetyl-3-(1-ethoxy-1-phenylmethylidene)-5-(N-acetyl-N-phenylsulfonylamino)-2-indolinone (preparation given) and 4-[N-acetyl-N-(2-trifluoracetylaminoethyl)amino]aniline (preparation given) were heated in DMF for 6 h at 120° to give 49% (Z)-3-[1-[4-[N-acetyl-N-(2-aminoethyl)amino]phenylamino]-1-phenylmethylidene]-5-phenylsulfonylamino-2-indolinone. Tested I inhibited proliferation of leiomyosarcoma SK-UT-1B cells in mice at <0.01 μ M-1.0 μ M.

IT 422518-12-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (sulfonylamino) (aminomethylidene) indolinones as cell proliferation inhibitors)

RN 422518-12-5 HCAPLUS

CN 2H-Indol-2-one, 1-acetyl-1,3-dihydro-5-[(phenylsulfonyl)amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:31423 HCAPLUS

DOCUMENT NUMBER:

136:102388

TITLE:

Preparation of 2-(benzoazolidinylene)propane-1,3-dione

derivatives as GnRH receptor antagonists

INVENTOR (S):

Hirano, Masaaki; Kawaminami, Eiji; Toyoshima, Akira;

10690708.trn

Page 20

Moritomo, Hiroyuki; Seki, Norio; Wakayama, Ryutaro;

Okada, Minoru; Kusayama, Toshiyuki

PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

PatentJapanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2002002533	A1 20020110	WO 2001-JP5813	20010704 <
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,
CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,
GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KR, KZ,	LC, LK, LR, LS,
LT, LU, LV,	MA, MD, MG, MK,	MN, MW, MX, MZ, NO,	NZ, PL, PT, RO,
RU, SD, SE,	SG, SI, SK, SL,	TJ, TM, TR, TT, TZ,	UA, UG, US, UZ,
VN, YU, ZA,	ZW		
		SL, SZ, TZ, UG, ZW,	
DE, DK, ES,	FI, FR, GB, GR,	IE, IT, LU, MC, NL,	PT, SE, TR, BF,
BJ, CF, CG,	CI, CM, GA, GN,	GW, ML, MR, NE, SN,	TD, TG
CA 2415010	AA 20020110	CA 2001-2415010	20010704 <
AU 2001071022	A5 20020114	AU 2001-71022	20010704 <
EP 1300398	A1 20030409	EP 2001-949914	20010704
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR	
US 2003191164	A1 20031009	US 2002-311688	20021219 <
US 6960591	B2 20051101		
		US 2005-155595	20050620 <
PRIORITY APPLN. INFO.:		JP 2000-204425	A 20000705
		JP 2001-153372	A 20010523
		WO 2001-JP5813	W 20010704
		US 2002-311688	A3 20021219
OTHER SOURCE(S):	MARPAT 136:1023	88	

Described are medicinal compns., in particular, gonadotropin releasing hormone (GnRH) receptor antagonists comprising propane-1,3-dione derivs. represented by the following general formula [I; R1, R2, R3, R4 = H,NO2, cyano, halo, (un)substituted hydrocarbyl, heterocyclyl, OH, CO2H, acyloxy, or acyl, substituent-S(O)n, H-S(O)n (wherein n = an integer of 0-2), (un)substituted CONH2, SO2NH2, or NH2; or two adjacent groups selected from R1-R4 are taken together to form aryl or cycloalkenyl; R5, R6 = H, halo, (un)substituted hydrocarbyl or NH2; X1, X2 = N, S, O; A, B =

GI

(un) substituted aryl or heterocyclyl; Z1, Z2, Z3, Z4 = C, N; provided that (1) when X1 and X2 are S or O, both or one of R5 and R6 is absent or (2) when 1 to 4 of Z1, Z2, Z3, and /or Z4 is N, the corresponding R1, R2, R3, and/or R4 is absent.] as the active ingredient. These compds. I are nonpeptide compds. having a GnRH antagonism and lowering sex hormone and are useful for the treatment of sex hormone-dependent diseases such as prostate cancer, breast cancer, endometriosis, and hysteromyoma. Thus, K2CO3 and NaI were successively added to a son. of 1-(3,5-difluorophenyl)-2-(5-hydroxy-1,3-dihydro-2H-benzimidazol-2-ylidene)-3-phenylpropane-1,3dione (preparation given) and 3-chloromethylpyridine hydrochloride in MeCN and stirred at 80° for 3.5 h to give 1-(3,5-difluorophenyl)-2-[5-(3pyridylmethoxy) -1,3-dihydro-2H-benzimidazol-2-ylidene] -3-phenylpropane-1,3dione (II). II and 24 other compds. I in vitro showed IC50 of 10-10 to 10-9 M for inhibiting the binding of 125I-D-Trp6-LHRH to human GnRH receptor. In particular, 2-(dihydrobenzoimidazol-2-ylidene)propane-1,3dione derivs. exhibited the GnRH receptor-inhibitory activity equivalent to that of the peptide GnRH antagonist cetrorelix.

IT 388596-43-8P 388596-44-9P 388596-45-0P 388596-46-1P 388599-22-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (benzoazolidinylene)propanedione derivs. as GnRH receptor antagonists for treating sex hormone-dependent diseases)

RN 388596-43-8 HCAPLUS

CN

Acetamide, N-[4-[[[2-[1-benzoyl-2-(3,5-difluorophenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 388596-44-9 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-(3,5-difluorobenzoyl)-2-(3-methylphenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4-fluoro-(9CI) (CA INDEX NAME)

10690708.trn

Page 22

RN 388596-45-0 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-(3,5-difluorobenzoyl)-2-(4-fluorophenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4-methoxy-(9CI) (CA INDEX NAME)

RN 388596-46-1 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-(3,5-difluorobenzoyl)-2-(2-methoxyphenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-3-(trifluoromethyl)-(9CI) (CA INDEX NAME)

$$F_{3}C$$

$$S=NH$$

$$NH$$

$$MeO$$

$$MeO$$

RN 388599-22-2 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-benzoyl-2-(3,5-difluorophenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-N,4-dimethyl-(9CI) (CA INDEX NAME)

IT 388600-59-7, N-[2-[1-Benzoyl-2-(3,5-difluorophenyl)-2-

10690708.trn

Page 23

oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4methylbenzenesul fonamide

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of (benzoazolidinylene)propanedione derivs. as GnRH receptor antagonists for treating sex hormone-dependent diseases)

388600-59-7 HCAPLUS RN

CN Benzenesulfonamide, N-[2-[1-benzoyl-2-(3,5-difluorophenyl)-2oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:581738 HCAPLUS

DOCUMENT NUMBER:

135:175421

TITLE:

Integrin expression inhibitors

INVENTOR(S):

Wakabayashi, Toshiaki; Funahashi, Yasuhiro; Hata, Naoko; Semba, Taro; Yamamoto, Yuji; Haneda, Toru; Owa, Takashi; Tsuruoka, Akihiko; Kamata, Junichi; Okabe, Tadashi; Takahashi, Keiko; Nara, Kazumasa; Hamaoka,

Shinichi; Ueda, Norihiro Eisai Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 153 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE		
WO	2001056607	A1		WO 2001-JP713	20010201 <		
	W: AU, CA, C	N, HU, JP	, KR, MX,	NO, NZ, RU, US			
	RW: AT, BE, C	H, CY, DE	, DK, ES,	FI, FR, GB, GR, IE, IT	, LU, MC, NL,		
	PT, SE, T	R					
CA	2399001	AA	20010809	CA 2001-2399001	20010201 <		
ΑU	2001028867	A5	20010814	AU 2001-28867	20010201 <		
ΑU	781506	B2	20050526				
ΕP	1258252	A1	20021120	EP 2001-948941	20010201 <		
	R: AT, BE, C	H, DE, DK	, ES, FR,	GB, GR, IT, LI, LU, NL	SE, MC, PT,		
	IE, FI, C	Y, TR					
NZ	520299	Α	20040528	NZ 2001-520299	20010201		
RU	2240826	C2	20041127	RU 2002-123580	20010201		
US	2004018192	A1	20040129	US 2002-181562	20020718 <		
ИО	2002003688	Α	20021003	NO 2002-3688	20020802 <		
US	2005176712	A1	20050811	US 2005-97218	20050404 <		

10690708.trn

Page 24

PRIORITY APPLN. INFO.:

 JP 2000-26080
 A 20000203

 JP 2000-402084
 A 20001228

 WO 2001-JP713
 W 20010201

 US 2002-181562
 A1 20020718

OTHER SOURCE(S): MARPAT 135:175421

AB Integrin expression inhibitors and remedies for arteriosclerosis, psoriasis, cancer, retinal angiogenesis, diabetic retinitis or inflammatory diseases, anticoagulant agents and cancerous metastasis inhibitors based on the integrin inhibitory effect. Namely, integrin expression inhibitors containing as the active ingredient sulfonamide compds. represented by the following general formula BKSO2N(R1)ZR, pharmacol. acceptable salts thereof or hydrates of the same wherein B represents optionally substituted C6-10 aryl or 6- to 10-membered heteroaryl wherein the ring may be partly saturated; K represents a single bond, -CH=CH- or -(CR4bR5b)mb- (wherein R4b and R5b may be the same or different and each represents hydrogen or C1-4 alkyl; and mb represents an integer of 1 or 2); R1 represents hydrogen or C1-6 alkyl; Z represents a single bond or CO-NH-; and R represents optionally substituted C6-10 aryl or 6- to 10-membered heteroaryl wherein the ring may be partly saturated

IT 165668-28-0P

RN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (integrin expression inhibitors for medical uses)

165668-28-0 HCAPLUS

CN Benzenesulfonamide, N-(2,3-dihydro-2-oxo-1H-indol-7-yl)-4-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:338351 HCAPLUS

DOCUMENT NUMBER:

134:340508

TITLE:

Preparation of 2-benzyl and 2-heteroaryl benzimidazole

NMDA/NR2B antagonists

INVENTOR(S):

McCauley, John A.; Theberge, Cory R.; Liverton, Nigel

J.; Claremon, David A.; Claiborne, Christopher F.

PATENT ASSIGNEE(S):

SOURCE:

Merck & Co., Inc., USA

PCT Int. Appl., 80 pp. CODEN: PIXXD2

CODEN: P

DOCUMENT TYPE:

Patent

10690708.trn

Page 25

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.										APPLICATION NO.					DATE				
8	PRIOF	WO SEP	2001 W: RW: 6316 2389 1242 R: 2003	0321 AE, CR, HU, LV, SE, ZA, GH, DE, 474 259 076 AT, IE, 5130	AG, CU, ID, MA, SG, ZW, GM, DK, CG,	AL, CZ, IL, MD, SI, AM, KE, ES, CI,	Al AM, DE, IN, MG, SK, AZ, LS, FI, CM, Bl AA Al DE, LV,	AT, DK, IS, MK, SL, BY, MW, FR, GA,	2001 AU, DM, JP, MN, TJ, KG, MZ, GB, GN, 2001 2002 ES, RO,	0510 AZ, DZ, KE, MW, TM, KZ, SD, GR, GW, 1113 0510 0925 FR, MK,	BA, EE, KG, MX, TR, MD, SL, IE, ML, GB, CY,	MO 2 BB, ES, KR, MZ, TT, RU, SZ, IT, MR, US 2 EP 2 GR, AL JP 2	000-1 BG, FI, KZ, NO, TZ, TZ, LU, NE, 000-1 000-1	US294 BR, GB, LC, NZ, UA, TM UG, MC, SN, 69656 23893 LI, 5343	2W, NL, TD, 01 259 LU, 79	BZ, GE, LR, PT, US, AT, PT, TG	CA, GH, LS, RO, UZ, SE, 20 SE,	O0010 CH, GM, LT, RU, VN, CH, BF, O0010 MC,	CN, HR, LU, SD, YU, CY, BJ, 025 026 PT,	< <
	OTHER GI	R SC	OURCE	(S) :			MARI	PAT	134:	34050		WO 2	000-1	JS29	470	V	V 2	0001	026	

$$R^{2}$$
 N
 R^{3}
 R^{4}
 R^{5}
 R^{5}

AΒ Novel benzimidazoles, substituted in the 2-position by substituted benzyl groups or heteroaryl groups, (I) [wherein R1, R2, R4, and R5 = independently H, Cl, F, OH, OMe, CF3, OCF3, NH2, CN, NO2, (amino)alkyl, aryl, alkylcarbonylamino, oxohydroxydibenzopyranyl-substituted carboxyphenylthioureido or carbonylaminoalkylcarbonylamino, R6SO2NH, R6SO2NMe, or R6SO2NHCH2; R3 = H, OH, NH2, alkylamino, arylamino, or :O; R6 = (un)substituted alkyl, (phenyl)alkenyl, Ph, naphthyl, or heterocyclic group; Y = 0, NH, (CH2)nCO(CH2)n, or (CH2)nCHR3(CH2)n; n = 0-5; Ar may be substituted with 0-3 N atoms in positions 2, 3, 5, or 6] were prepared as effective NMDA NR2B glutamate receptor antagonists. For example, cycloaddn. of phenylenediamine and (4-phenoxyphenyl)acetic acid in presence of EDC and HOBt in DMF afforded 2-(4-phenoxybenzyl)-1Hbenzimidazole. Exptl. protocols for assessing the inhibition of NR1A/2B NMDA receptor activation (FLIPR assay) and determining the apparent dissociation

CN

consts. against the human NR1A/NR2B receptor (binding assay) are given (no data). I are useful for relieving pain and treating depression, schizophrenia, Parkinson's disease, or stroke (no data).

IT 337965-02-3P 337965-03-4P 337965-05-6P 337965-07-8P 337965-09-0P 337965-11-4P 337965-13-6P 337965-15-8P 337965-17-0P 337965-19-2P 337965-21-6P 337965-23-8P 337965-25-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2-benzyl and 2-heteroaryl benzimidazole NMDA/NR2B antagonists by cycloaddn. of phenylenediamines with arylacetates)

RN 337965-02-3 HCAPLUS

Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-(9CI) (CA INDEX NAME)

RN 337965-03-4 HCAPLUS

CN Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-02-3 CMF C26 H21 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

337965-05-6 HCAPLUS RN

Benzenesulfonamide, 2-methyl-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME) CN

CM1

CRN 337965-04-5

CMF C27 H23 N3 O3 S 1

CM

CRN 76-05-1 CMF C2 H F3 O2

RN337965-07-8 HCAPLUS

Benzenesulfonamide, 3-methyl-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME) CN

CM 1

CRN 337965-06-7

CMF C27 H23 N3 O3 S

Me
$$\stackrel{\circ}{\underset{0}{\text{NH}}}$$
 $\stackrel{H}{\underset{N}{\text{NH}}}$ CH_2

CM 2

10690708.trn

Page 28

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-09-0 HCAPLUS

CN Benzenesulfonamide, 4-methyl-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-08-9 CMF C27 H23 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-11-4 HCAPLUS

CN Benzenesulfonamide, 3-chloro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-10-3

CMF C26 H20 Cl N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-13-6 HCAPLUS

CN Benzenesulfonamide, 4-chloro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-12-5 CMF C26 H20 C1 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-15-8 HCAPLUS

CN Benzenesulfonamide, 2-fluoro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

10690708.trn

Page 30 .

CRN 337965-14-7 CMF C26 H20 F N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-17-0 HCAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-16-9 CMF C26 H20 F N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-19-2 HCAPLUS

10690708.trn

Page 31

CN Benzenesulfonamide, 4-methoxy-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-18-1 CMF C27 H23 N3 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-21-6 HCAPLUS

CN Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-2-(trifluoromethoxy)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-20-5 CMF C27 H20 F3 N3 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-23-8 HCAPLUS

CN Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-2-(trifluoromethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-22-7 CMF C27 H20 F3 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-25-0 HCAPLUS

CN Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-4-(trifluoromethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-24-9 CMF C27 H20 F3 N3 O3 S

CM 2

10690708.trn

Page 33

CRN 76-05-1 CMF C2 H F3 O2

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

3

ACCESSION NUMBER:

1999:819384 HCAPLUS

DOCUMENT NUMBER:

132:64058

TITLE:

Preparation and antitumor activity of

arylsulfonanilide phosphates

INVENTOR(S): PATENT ASSIGNEE(S): Houze, Jonathan B.

Tularik Inc., USA

SOURCE:

PCT Int. Appl., 42 pp. CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAC	rent 1	NO.			KIND DATE				į	APPLICATION NO.						DATE			
	DE, DK, EE,					AT, AU, AZ, BA, ES, FI, GB, GD, KP, KR, KZ, LC,					BB, BG, BR, BY, CA, GE, GH, GM, HR, HU, LK, LR, LS, LT, LU,					CN, IL, MD,	IN, MG,	CZ, IS, MK,		
			TM,	-	TT,	-	-	-	-	•	•	SD, ZW,		-	-	-	•	•		
		RW:	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	ZW, NL, TD,	PT,							
	CA	2335										.999-:		559		1:	9990	616	<	
	AU	9945	768			A1		2000	0110	1	AU 1	999-	4576	3		1	9990	616	<	
	AU	7636	87			B2		2003	0731											
	EP	1090	014			A1		2001	0411		EP 1	999-	9287	77		1	9990	616	< - -	
	EP	1090	014			B1		2003	0903											
			ΙE,	FI				ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		2002				T2		2002	0625		JP 2	000-	5559	10		1	9990	616	<	
~		2488				E		2003	0915			.999-				1	9990	616		
B		6211				В1		2001		1	US 2	000-	5953	98		2	0000	614	< - -	
		2001		30		A1		2001		1	US 2	001-	7794	19		2	0010	207	<	
		6417				B2		2002	0709											
	PRIORITY	Y APP	LN.	INFO	. :							.998-								
										1	WO 1	.999-1	US13	759	V	v 1:	9990	616		
												999-		-						
	_										US 2	000-	5953	98	1	A1 2	0000	614		
	OTHER SO	OURCE	(S) :			MARI	PAT	132:0	64058	3										

10690708.trn

Page 34

AB The title compds. I [R1 = H, alkyl, heteroalkyl; R2, R3 = H, halo, alkyl, etc.; R2 and R3 when attached to adjacent C atoms can form a ring; R4, R5 = H, alkyl, aryl, etc.; Ar = substituted Ph] were prepared and their antitumor activity assessed. E.g., 5-(pentafluorophenylsulfonamido)-2-methoxyphenyl phosphate was prepared

IT 253141-42-3P

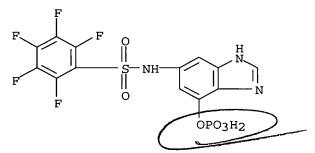
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and antitumor activity of arylsulfonanilide phosphates)

RN 253141-42-3 HCAPLUS

CN Benzenesulfonamide, 2,3,4,5,6-pentafluoro-N-[7-(phosphonooxy)-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

Ι



REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:505930 HCAPLUS

DOCUMENT NUMBER:

131:157761

TITLE:

5-Membered heterocyclic condensed benzo derivatives,

their preparation, and their use as drugs

INVENTOR(S):

Ries, Uwe; Hauel, Norbert; Mihm, Gerhard; Priepke, Henning; Binder, Klaus; Stassen, Jean Marie; Wienen,

Wolfgang; Zimmermann, Rainer

PATENT ASSIGNEE(S):

Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 94 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

. 2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

10690708.trn

Page 35

```
PATENT NO.
                            KIND
                                    DATE
                                                 APPLICATION NO.
                                                                           DATE
                            ----
                                    -----
                                                 -----
     -----
     DE 19804085
                             A1
                                    19990805
                                                 DE 1998-19804085
                                                                           19980203 <--
                                                 CA 1999-2319494
     CA 2319494
                             AA
                                    19990812
                                                                            19990128 <--
                             A1
                                    19990812
                                                 WO 1999-EP537
                                                                           19990128 <--
     WO 9940072
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
              CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                    19990823
                                                 AU 1999-27201
     AU 9927201
                                                                            19990128 <--
                             A1
     EP 1060166
                                                 EP 1999-907437
                                    20001220
                                                                           19990128 <--
                             A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
     JP 2002502844
                             T2
                                    20020129
                                                 JP 2000-530502
                                                                            19990128 <--
     US 6114532
                             Α
                                    20000905
                                                 US 1999-243200
                                                                           19990202 <--
PRIORITY APPLN. INFO.:
                                                 DE 1998-19804085
                                                                        A 19980203
                                                 US 1998-77694P
                                                                        P 19980312
                                                 DE 1998-19834325
                                                                        A 19980730
                                                 WO 1999-EP537
                                                                        W 19990128
OTHER SOURCE(S):
                            MARPAT 131:157761
     Approx. 300 antithrombotic title compds. such as 4-[5-[N-(8-
     quinolylsulfonyl)-N-(carboxymethyl)amino]-1-methyl-1H-benzimidazol-2-
     ylmethyl]benzamidine hydrochloride (I), 4-[5-[N-(benzenesulfonyl)-N-[2-
     (dimethylamino) ethyl] amino] -1-benzyl-1H-benzimidazol-2-
     ylmethyl]benzamidine dihydrochloride, 4-[5-[N-(3-carboxypropionyl)-N-
     (cyclopentyl)amino]-1-methyl-1H-benzimidazol-2-ylmethyl]benzamidine
     hydrochloride (II), and 4-[5-[N-(8-quinolylsulfonyl)-N-
     (carboxymethyl)amino]-1-methyl-1H-benzothiazol-2-ylmethyl]benzamidine
     hydrochloride were prepared by standard methods. The ED200 in \mu M for I was
     0.92 and for II was 0.82. Formulations for the antithrombotics were
     given.
IT
     237750-73-1 237750-74-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (preparation and antithrombotic activity of benzimidazolylmethylbenzamidines
     237750-73-1 HCAPLUS
RN
     Benzenesulfonamide, N-[2-[(4-cyanophenyl)methyl]-1H-benzimidazol-5-yl]-
CN
            (CA INDEX NAME)
     (9CI)
```

$$\begin{array}{c|c} O & & & & \\ O & & & & \\ O & & & & \\ Ph-S-NH & & & \\ O & & & \\ \end{array}$$

RN 237750-74-2 HCAPLUS
CN Benzenesulfonamide, N-[2-[(4-cyanophenyl)methyl]-7-methyl-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ Ph-S-NH \\ O \\ \hline \\ Me \\ \end{array}$$

IT 236414-29-2P 236414-31-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and antithrombotic activity of benzimidazolylmethylbenzamidines

RN 236414-29-2 HCAPLUS

CN Benzenecarboximidamide, 4-[[5-[(phenylsulfonyl)amino]-1H-benzimidazol-2-yl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
& NH \\
\parallel \\
C-NH_2
\end{array}$$

$$\begin{array}{c|c}
& NH \\
& C-NH_2
\end{array}$$

HCl

RN 236414-31-6 HCAPLUS

CN Benzenecarboximidamide, 4-[[4-methyl-6-[(phenylsulfonyl)amino]-1H-benzimidazol-2-yl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L23 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1999:35065 HCAPLUS

10690708.trn

Page 37

03/24/2006 10690708.trn

DOCUMENT NUMBER:

130:110166

TITLE:

Preparation of amidinophenylpropionyltetrahydroquinoli

nes and related compounds as antithrombotics.

INVENTOR (S):

Heckel, Armin; Soyka, Rainer; Grell, Wolfgang; Haaksma, Eric; Binder, Klaus; Zimmermann, Rainer

Boehringer Ingelheim Pharma K.-G., Germany

PATENT ASSIGNEE(S):

Ger. Offen., 50 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
	1972						1999		:	DE 1	997-	1972	7117					
	2288																	
WO	9900	371			A1		1999	0107	1	WO 1	998-	EP38	00		1	9980i	522	<
	W :	AL,	AM,	AT,	AU,	AZ,	, BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,	
		KP.	KR.	KZ.	LC.	LK	LR,	LS.	LT.	LU.	LV,	MD.	MG.	MK.	MN,	MW.	MX,	
				-			RU,	-				•		-		•		
							YU,											
	₽W-	-	-	-	-		SD,	-	-	-	-	-	-	-	-	-		
	1011.	•	•	•	•		, 35, , IT,	•	•	•	•	•	•	•	•			
							, 11, , NE,				ΕΙ,	, עכ	Dr,	ъо,	Cr,	CG,	CI,	
אזז	0007				•		•	•	•		000	0727	0		1	0000	(2)	_
	9887																	
	9916									Eb I	998-	9386	21		1	9980	522	<
EP	9916																	
	R:	ΑT,	ΒE,	CH,	DE,	DK	, ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	FI															
JP	2002	5110	88		T2		2002	0409		JP 1	999-	5052	65		1	9980	622	<
AT	2546	02			E		2003	1215		AT 1	998-	9386	21		1	9980	622	
MX	9911						2000	0630	1	MX 1	999-	1126	1		1	9991:	206	<
US	6300	342			В1		2001	1009		US 1	999-	4579	61		1	9991	209	<
PRIORITY												1972						-
				•								EP38				9980		
OTHER SO	OURCE	(S):			MAR	PAT	130:	1101				2130	•	•		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

AB Title compds. [I; Ra = H, NO2, amino, aminocarbonyl; Rb = cyano, aminomethyl, (substituted) amidino; Rc, Rd = H, F, Cl, Br, iodo, Me, MeO, NO2, amino; A = (substituted) ethylene, ethyenylene, propylene, etc.; B = bond, (substituted) methylene, ethylene, ethenylene, propylene, etc.; W = N, CH; Y = CH2, CO, CS], were prepared Thus, 1-[3-(4-amidinophenyl)propionyl]-1,2,3,4-tetrahydroquinoline-6-carboxylic acid methyl-N-phenylamide (preparation given) had a thrombin time ED200 = 0.02 μM.

IT 219643-32-0P 219644-16-3P

10690708.trn

GI

Page 38

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylpropionyltetrahydroquinolines and related compds. as antithrombotics)

RN 219643-32-0 HCAPLUS

1H-Indol-5-amine, 1-[3-(4-cyanophenyl)-1-oxopropyl]-2,3-dihydro-N-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ Ph-S-NH & & & \\ O & & & & \\ \end{array}$$

RN 219644-16-3 HCAPLUS

CN 1H-Indol-5-amine, 1-[3-[4-(aminoiminomethyl)phenyl]-1-oxopropyl]-2,3-dihydro-N-(phenylsulfonyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH \\ \parallel & \parallel & \parallel \\ O & \parallel & \parallel & \parallel \\ O & N-C-CH_2-CH_2 \end{array}$$

HCl

L23 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:682229 HCAPLUS

DOCUMENT NUMBER:

129:302552

TITLE:

Preparation of 1,4-disubstituted cyclic amine

derivatives as serotonin antagonists

INVENTOR (S):

Kitazawa, Noritaka; Ueno, Kohshi; Takahashi, Keiko; Kimura, Teiji; Sasaki, Atsushi; Kawano, Koki; Okabe, Tadashi; Komatsu, Makoto; Matsunaga, Manabu; Kubota,

Atsuhiko

PATENT ASSIGNEE(S):

Eisai Co., Ltd., Japan

PCT Int. Appl., 635 pp.

DOCUMENT TYPE:

Patent

CODEN: PIXXD2

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9843956	A1	19981008	WO 1998-JP1481	19980331 <
W: AU, CA, CN,	HU, JP	, KR, MX,	NO, NZ, RU, US	
RW: AT, BE, CH,	DE, DK	, ES, FI,	FR, GB, GR, IE, IT, LU,	MC, NL, PT, SE
CA 2280753	AA	19981008	CA 1998-2280753	19980331 <

10690708.trn

Page 39

03/24/2006	10690708.trn

· AU	9865209	A1	19981022	AU 1998-65209	19980331 <
AU	748038	B2	20020530		
ZA	9802707	Α	19991020	ZA 1998-2707	19980331 <
EP	976732	A1	20000202	EP 1998-911137	19980331 <
EP	976732	B1	20041124		
	R: AT, BE, CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, PT, IE, FI
NZ	337651	Α	20020426	NZ 1998-337651	19980331 <
RU	2203275	C2	20030427	RU 1999-123039	19980331
AT	283259	E	20041215	AT 1998-911137	19980331
ES	2230681	Т3	20050501	ES 1998-911137	19980331
US	6448243	В1	20020910	US 1999-367227	19990811 <
NO	9904720	Α	19991130	NO 1999-4720	19990928 <
NO	314543	В1	20030407		
HK	1026700	A1	20050826	HK 2000-105871	20000919
, US	2002086999	A1	20020704	US 2001-846259	20010502 <
US	2002019531	A1	20020214	US 2001-859517	20010518 <
8 US	6579881	В2	20030617		
PRIORTT	Y APPLN. INFO.:			JP 1997-98433	A 19970331
				JP 1997-366764	A 19971226
				WO 1998-JP1481	W 19980331
				US 1999-367227	A3 19990811

OTHER SOURCE(S):

MARPAT 129:302552

GΙ

The title compds. (I; A, B, C, D, T, Y, and Z each represents a methine group or a nitrogen atom; R1, R2, R3, R4, and R5 each represents a substituent, such as halo, OH, hydroxyalkoxy, lower alkyl, etc.; n is an integer of 0 to 3; m is an integer of 0 to 6; and p is an integer of 1 to 3; dotted bond represents a single or double bond) are prepared I have serotonin antagonism and serve as drugs for the treatment, alleviation and prevention of spastic paralysis or a central muscle relaxant for alleviating myotonia. Thus, indoline was reacted with 1-(4-fluorophenyl)-4-piperidone in the presence of NaB(OAc)3 in AcOH and dichloroethane to give 63% the title compound (II), which showed binding activity of 623.94 and > 200 nM for 5HTla and 5HT2 resp.

IT 214611-39-9P 214612-56-3P 214612-57-4P 214616-20-3P 214617-24-0P 214617-25-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1,4-disubstituted cyclic amine derivs. as serotonin antagonists)

RN 214611-39-9 HCAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-2,3-dihydro-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 214612-56-3 HCAPLUS

CN Benzenesulfonamide, N-[2,3-dihydro-1-(1-methyl-4-piperidinyl)-1H-indol-6-yl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 214612-57-4 HCAPLUS

CN Benzenesulfonamide, N-[1-(1-ethyl-4-piperidinyl)-2,3-dihydro-1H-indol-6-yl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 214616-20-3 HCAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-2,3-dihydro-1H-indol-6-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 214617-24-0 HCAPLUS

CN Benzenesulfonamide, N-[2,3-dihydro-1-(1-methyl-4-piperidinyl)-1H-indol-6-yl]-4-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 214617-25-1 HCAPLUS

CN Benzenesulfonamide, N-[1-(1-ethyl-4-piperidinyl)-2,3-dihydro-1H-indol-6-yl]-4-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

IT 214615-14-2P

10690708.trn

Page 42

05/02/2006

10690708.trn

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1,4-disubstituted cyclic amine derivs. as serotonin antagonists)

214615-14-2 HCAPLUS RN

CNBenzenesulfonamide, N-(2,3-dihydro-1H-indol-6-yl)-4-fluoro- (9CI) INDEX NAME)

REFERENCE COUNT:

54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 124 ibib abs hitstr 1-20

L24 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:150554 HCAPLUS

DOCUMENT NUMBER:

138:188073

TITLE:

Preparation of dipeptide heterocyclic aromatic

compounds as growth hormone secretagogues

INVENTOR(S):

Tino, Joseph A.

PATENT ASSIGNEE(S):

Bristol-Myers Squibb Company, USA

SOURCE:

U.S., 157 pp., Cont.-in-part of U.S. Ser. No. 506,749,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
		-		 -		
US 6525203	B1	20030225	US 2000-662448		20000914 <	
US 6518292	B1	20030211	US 2000-506749		20000218 <	
ZA 2001006854	Α	20021120	ZA 2001-6854		20010820 <	
US 6660760	B1	20031209	US 2002-282182		20021028 <	
US 2004002525	A1	20040101	US 2002-281818		20021028 <	
US 6969727	B2	20051129			•	
US 2004029935	A1	20040212	US 2002-281649		20021028 <	
US 6908938	B2	20050621				
US 2004072881	A1	20040415	US 2002-281848		20021028 <	
PRIORITY APPLN. INFO.:			US 1999-124131P	P	19990312	
			US 1999-154919P	P	19990921	
			US 2000-506749	Ā2	20000218	
OTHER COIDER (C)	MADDAG	120 100000				

OTHER SOURCE(S):

MARPAT 138:188073

GI

H2NCMe2CONH PhCH₂O NHSO₂Me

AΒ R1R1aCXaNR6COYXb [R1 = (un)substituted alkyl, (hetero)aryl(alkyl), etc.; Rla = H or (cyclo)alkyl; R6 = H, (cyclo)alkyl, alkenyl, aryl; Xa = substituted 2-benzoxazolyl, 2-benzothiazolyl, or 2-benzimidazolyl; Xb = (di)(alkyl)amino, (un)substituted imidazolyl; Y = phenylene, (phenylene-interrupted) alkylene, (un) substituted alkylene, aza- or oxaalkylene, or alkenylene] were prepared as growth hormone production and/or release stimulants. Thus, dipeptide benzimidazole derivative I (Boc = tert-butoxycarbonyl) was prepared by a multistep procedure starting from Boc-D-Ser(CH2Ph)-OH, 4-nitro-o-phenylenediamine, Boc-methylalanine, and MeSO2C1.

IT 295335-10-3P

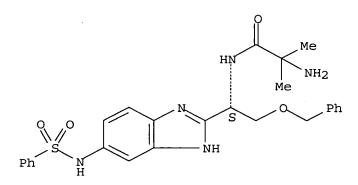
> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of dipeptide heterocyclic aromatic compds. as growth hormone secretagogues)

RN

295335-10-3 HCAPLUS
Propanamide, 2-amino-2-methyl-N-[(1S)-2-(phenylmethoxy)-1-[5-CN [(phenylsulfonyl)amino]-1H-benzimidazol-2-yl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

2002:814232 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:326555

TITLE: Azo dye-containing coloring composition for image

formation with improved ozone resistance

INVENTOR(S): Fujiwara, Toshiki; Hanaki, Naoyuki; Tanaka, Shigeaki;

Omatsu, Tadashi; Yabuki, Yoshiharu Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 256 pp.

10690708.trn Page 44 11:48 CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

```
PATENT NO.
                          KIND
                                  DATE
                                              APPLICATION NO.
     _____
                          ----
                                  -----
                                              -----
                                                                       _____
                                              WO 2002-JP3490
     WO 2002083795
                          A2
                                  20021024
                                                                       20020408 <--
    WO 2002083795
                          A3
                                  20030306
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                                      20010409 <--
     JP 2002309115
                           A2
                                  20021023
                                              JP 2001-110333
     JP 2002309133
                           A2
                                  20021023
                                              JP 2001-110334
                                                                       20010409 <--
                                              JP 2001-110335
     JP 2002309116
                          A2
                                  20021023
                                                                       20010409 <--
                                              JP 2001-237903
    JP 2003049100
                          A2
                                  20030221
                                                                      20010806
     JP 2003064275
                          A2
                                  20030305 JP 2001-254878
                                                                      20010824
     JP 2002371214
                         A2
                                  20021226 JP 2002-12015
                                                                       20020121 <--
     CA 2439113
                           AA
                                  20021024 CA 2002-2439113
                                                                       20020408 <--
     EP 1377642
                          A2
                                  20040107
                                            EP 2002-713302
                                                                       20020408
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2004089200
                                  20040513
                                               US 2003-471650
                                                                       20030912 <--
                          A1
                                               JP 2001-110333 A 20010409
PRIORITY APPLN. INFO.:
                                                                  A 20010409
                                               JP 2001-110334
                                                                   A 20010409
                                               JP 2001-110335
                                                                   A 20010409
                                               JP 2001-110457
                                               JP 2001-237903
                                                                   A 20010806
                                               JP 2001-254878
                                                                   A 20010824
                                                                   A 20020121
W 20020408
                                               JP 2002-12015
                                               WO 2002-JP3490
```

OTHER SOURCE(S): MARPAT 137:326555

 $\ensuremath{\mathsf{AB}}$ A coloring composition for image formation comprises an azo dye having an aromatic

nitrogen-containing 6-membered heterocyclic ring as a coupling component and which comprises an azo compound having an oxidation potential better than 1.0 V vs.SCE and having at least two substituents having a pKa value of -10 to 5 in water. Improved ozone resistance is obtained with an azo compound showing a maximum absorption at a wavelength between 500 nm and 580 nm with a half-value width of 150 nm or narrower. The dyes may be used in jet ink compns., color filters, color toners, etc. In an example, 2-amino-4,5-dicyano-1-(ethoxycarbonylmethyl)imidazole \rightarrow 2,6-bis(octylanilino)-4-methylpyridine was prepared as an azo dye (λ max 528 nm in DMF).

IT 473465-65-5 473555-05-4

RL: TEM (Technical or engineered material use); USES (Uses) (dye; azo dye-containing coloring compns. for image formation with improved ozone resistance)

RN 473465-65-5 HCAPLUS

CN Benzenesulfonamide, N-[2-[[5-[[4-cyano-3-(1,1-dimethylethyl)-1-(5-nitro-2-benzothiazolyl)-1H-pyrazol-5-yl]azo]-4-methyl-6-[(1,1,3,3-tetramethylbutyl)amino]-2-pyridinyl](4-octylphenyl)amino]-6-

03/24/2006 10690708.trn

benzothiazolyl]-2-(octyloxy)-5-(1,1,3,3-tetramethylbutoxy)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Bu-t

RN 473555-05-4 HCAPLUS

CN Benzenesulfonamide, 2-(octyloxy)-N-[2-[[5-[(3-phenyl-1,2,4-thiadiazol-5-yl)azo]-6-[(1,1,3,3-tetramethylbutyl)amino]-2-pyridinyl](2,4,6-trimethylphenyl)amino]-6-benzothiazolyl]-4-(1,1,3,3-tetramethylbutyl)-(9CI) (CA INDEX NAME)

Me (CH₂) 7-0 0 Me Me

PAGE 1-B

----- Ph

-- CMe $_3$

L24 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:814122 HCAPLUS

DOCUMENT NUMBER:

137:326554

TITLE:

Pyrazole azo dyes, their production and coupling

agents therefor

INVENTOR (S):

Fujiwara, Toshiki; Hanaki, Naoyuki; Tanaka, Shigeaki;

Omatsu, Tadashi; Yabuki, Yoshiharu

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 137 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
_	WO 2002083662 WO 2002083662				A2 20021024 A3 20030306			1	WO 2	002-	JP34	91		20020408 <			<	
		AE, CO, GM, LT, PT,	AG, CR, HR, LU, RO,	AL, CU, HU, LV, RU,	CZ, ID, MA, SD,	DE, IL, MD, SE,	AU, DK, IN, MG, SG, ZA,	DM, IS, MK, SI,	DZ, KE, MN, SK,	EC, KG, MW, SL,	EE, KP, MX, TJ,	ES, KR, MZ, TM,	FI, KZ, NO, TN,	GB, LC, NZ, TR,	GD, LK, OM, TT,	GE, LR, PH, TZ,	GH, LS, PL, UA,	TTM
	RW:	GH, CY,	GM, DE,	KE, DK,	LS, ES,	MW, FI,	MZ, FR, CM,	SD, GB,	SL, GR,	SZ, IE,	TZ, IT,	UG, LU,	ZM, MC,	ZW, NL,	AT, PT,	BE, SE,	CH, TR,	m

10690708.trn

Page 47

```
JP 2002322151
                                20021108
                                            JP 2001-126239
                                                                    20010424 <--
                          A2
    JP 2002371079
                          A2
                                20021226
                                            JP 2002-12108
                                                                    20020121 <--
    EP 1377640
                          A2
                                20040107
                                            EP 2002-708777
                                                                    20020408
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     CN 1501962
                                20040602
                                             CN 2002-808009
                                                                    20020408
                          Α
    US 2004122219
                                20040624
                                            US 2003-473419
                                                                    20030930 <--
                          Α1
PRIORITY APPLN. INFO.:
                                            JP 2001-110458
                                                                 Α
                                                                    20010409
                                            JP 2001-126239
                                                                    20010424
                                                                 Α
                                                                 Α
                                            JP 2002-12108
                                                                    20020121
                                                                 W
                                            WO 2002-JP3491
                                                                    20020408
```

OTHER SOURCE(S): MARPAT 137:326554

GI

$$\begin{array}{c|c}
R^1 & R^2 \\
N & N = N \\
N & N = N \\
R^3 & N = N \\
N & N$$

AB Aminopyrazole diazo component-based azo dyes (I; A1, A2 = N, optionally substituted -CH=; R1 = H, organic group; R2 = H, halogen, CN; R3 = H, organic group; R4, R5, R6, R7 = H, organic group, carboxy, sulfo, carbamoyl) are obtained from novel diamino heterocyclic coupling components. I are suitable for image formation and recording and have excellent ozone resistance. In an example, 5-amino-3-tert-butyl-4-cyanopyrazole was diazotized and coupled with 3-cyano-4-methyl-2,6-bis(p-octylanilino)pyridine and the product was condensed with 2-chlorobenzothiazole to give a dye (λmax 545 nm in DMF).

IT 473465-24-6P 473465-65-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dye; production of pyrazole azo dyes for image formation and recording)

RN 473465-24-6 HCAPLUS

CN Benzenesulfonamide, N-[2-[4-cyano-5-[[5-cyano-4-methyl-6-[(1,1,3,3-tetramethylbutyl)amino]-2-[(2,4,6-trimethylphenyl)amino]-3-pyridinyl]azo]-3-(1,1-dimethylethyl)-1H-pyrazol-1-yl]-6-benzothiazolyl]-2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)

RN 473465-65-5 HCAPLUS

CN Benzenesulfonamide, N-[2-[[5-[[4-cyano-3-(1,1-dimethylethyl)-1-(5-nitro-2-benzothiazolyl)-1H-pyrazol-5-yl]azo]-4-methyl-6-[(1,1,3,3-tetramethylbutyl)amino]-2-pyridinyl](4-octylphenyl)amino]-6-benzothiazolyl]-2-(octyloxy)-5-(1,1,3,3-tetramethylbutoxy)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Bu-t

L24 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:657951 HCAPLUS

DOCUMENT NUMBER:

137:201300

TITLE:

Azoles, e.g., 1,3-benzothiazole and

[1,3]thiazolo[5,4-b]pyridine derivatives, as malonyl-CoA decarboxylase inhibitors, useful as

metabolic modulators

INVENTOR(S):

Arrhenius, Thomas; Cheng, Jie Fei; Wilson, Mark;

Serafimov, Rossy

PATENT ASSIGNEE(S):

Chugai Seiyaku Kabushiki Kaisha, Japan

SOURCE:

PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English 2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.								APPLICATION NO.									
WO		0660	35		A2		2002	0829	1						20020219 <			
		AE, CO, GM, LS, PL,	AG, CR, HR, LT, PT,	AL, CU, HU, LU, RO,	AM, CZ, ID, LV, RU,	AT DE IL MA SD	, AU, , DK, , IN, , MD, , SE,	AZ, DM, IS, MG, SG,	BA, DZ, JP, MK, SI,	EC, KE, MN, SK,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, OM,	GH, LR, PH,	
	RW:	GH, CY,	GM, DE,	KE, DK,	LS, ES,	MW FI	MZ, FR, CM,	SD, GB,	SL, GR,	SZ, IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	TR,	
	24374	109			AA		2002	0829		CA 2	002-	2437	409		2	00202	219 •	<
EP	13702 R:	ΑT,	BE,	CH,	DE,	DK.	2003 ES, RO,	FR,	GB,	GR,	IT,							
	20020																	
	14927 20045															00202		
RU	22587	706			C2		2005	0820	1	RU 2	003-	1283	07		20			
	52688 20030										002-! 003-:							
US	20040	925	03						1	US 2	003-4	4683	79		20	00308	319 •	<
PRIORITY	Y APPI	_N . ∶	INFO	. :							001-2 002-1							
OTHER SOURCE(S):					MARI	PAT	137:	2013		2		,			. 2.	, , , ,		

10690708.trn

Page 50

$$R^1$$
 R^2 C Y SH R^6 Y SH R^7 R^7 R^7 SH R^8

AB The invention relates to methods of treatment of certain metabolic diseases, and to novel compds. and their prodrugs, and/or pharmaceutically acceptable salts, and to pharmaceutical compns. containing such compds., useful in treating such diseases. In particular, the invention relates to the use of novel compds. and compns. for treatment of cardiovascular diseases, diabetes, cancers, acidosis, and obesity, through the inhibition of malonyl-CoA decarboxylase (MCD). The compds. have formulas I and II. In the case of I, Y = S or O; C = atoms to form substituted monocyclic 5to 7- membered ring fusion containing 1-3 heteroatoms (N/O/S); R1 and R2 are different, and each = H, halo, OH, NO2, cyano, (un) substituted alkyl or alkoxy, alkylamino, alkylsulfanyl, aryl, various functional groups and sidechains, or (un)substituted monocyclic 3- to 7-membered ring containing 0-3 heteroatoms (N/O/S). In the case of II, Y = S or O; R6 is placed at either the 5- or 6-position; R6 = phosphorylated amino, heterocyclic ring attached by (un) substituted NH, CO, or O, various acylated amino groups, sulfonylated amino groups, or cyclic amines; R7 = H, alkyl, alkoxy, halo, cyano, sulfonyl, aminosulfonyl; or R6R7 = fused substituted 5- to 7-membered ring containing 1-3 heteroatoms (N/O/S). Examples provided include explicit prepns. of seven compds. I and II, prepns. of several intermediates, and inhibition data for 10 compds. I and II. In addition, over 300 specific compds. I and II are claimed by name. For instance, reductive N-alkylation of 6-amino-1,3-benzothiazole-2-thiol using 2-methylpropanal and NaBH3CN (61%), followed by carbamoylation of the resultant secondary amine with α, α, α -trifluoro-p-tolyl isocyanate (64%) gave title compound III. This highly preferred compound inhibited rat cardiac MCD in vitro with an IC50 of 0.031 μM .

III

IT 452104-11-9P, 4-Fluoro-N-isopropyl-N-(2-mercaptobenzothiazol-6-yl)benzenesulfonamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzothiazoles and thiazolopyridines as

10690708.trn

Page 51

CN

malonyl-CoA decarboxylase inhibitors, useful as metabolic modulators) RN 452104-11-9 HCAPLUS

Benzenesulfonamide, N-(2,3-dihydro-2-thioxo-6-benzothiazolyl)-4-fluoro-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

L24 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:353428 HCAPLUS

DOCUMENT NUMBER: 136:369603

TITLE: Preparation of (sulfonylamino) (aminomethylidene) indoli

nones as cell proliferation inhibitors.

INVENTOR(S): Walter, Rainer; Heckel, Armin; Roth, Gerald Juergen; Kley, Joerg; Schnapp, Gisela; Lenter, Martin; Van

Meel, Jacobus Constantinus Antonius; Spevak, Walter;

Weyer-Czernilofsky, Ulrike

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.				D DATE			ICATION					
	200203 W: A C G L P U RW: G	6564 E, AG, O, CR, M, HR, S, LT, T, RO, S, UZ, H, GM,	AL, CU, HU, LU, RU, VN, KE,	A1 AM, CZ, ID, LV, SD, YU, LS,	2002 AT, AU, DE, DK, IL, IN, MA, MD, SE, SG, ZA, ZW, MW, MZ,	0510 AZ, DM, IS, MG, SI, AM, SD,	WO 2 BA, BB, DZ, EC, JP, KE, MK, MN, SK, SL, AZ, BY, SL, SZ,	BG, BR EE, ES KG, KP MW, MX TJ, TM KG, KZ	2523 , BY, , FI, , KR, , MZ, , TR, , MD, , ZW,	BZ, GB, KZ, NO, TT, RU, AT,	200110 CA, CH, GD, GE, LC, LK, NZ, PH, TZ, UA, TJ, TM BE, CH,	CN, GH, LR, PL, UG,	
			-	-	CM, GA,			•	•		SE, TR, TD, TG	BF,	
DE											200011	101 <	
											200110		
											200110		
											SE, MC,		
		-			FI, RO,	•		•	,	,	2-,,	,	
JР									324		200110	030	
											20011		
					2003								
								003-646	123		200308	322 <	
											200308		
PRIORITY								000-100			200011		
							US 2	000-251)55P	I	200012	201	
							WO 2001-EP12523						
								2001-293			3 200111		
OM!!==													

OTHER SOURCE(S): MARPAT 136:369603

GI

$$R^{2}SO_{2}NR^{6}$$
 $NR^{4}R^{5}$
 $NR^{4}R^{5}$

AB Title compds. [I; X = O, S; R1 = H, alkoxycarbonyl, alkanoyl; R2 = (substituted) alkyl, alkenyl, Ph, heteroaryl, cycloalkyl, naphthyl, etc.; R3 = H, alkyl; R4 = (substituted) Ph, naphthyl, heteroaryl; R5, R6 = H, alkyl], were prepared Thus, 1-acetyl-3-(1-ethoxy-1-phenylmethylidene)-5-(N-acetyl-N-phenylsulfonylamino)-2-indolinone (preparation given) and 4-[N-acetyl-N-(2-trifluoracetylaminoethyl)amino]aniline (preparation given) were heated in DMF for 6 h at 120° to give 49% (Z)-3-[1-[4-[N-acetyl-N-(2-aminoethyl)amino]phenylamino]-1-phenylmethylidene]-5-phenylsulfonylamino-2-indolinone. Tested I inhibited proliferation of leiomyosarcoma SK-UT-1B cells in mice at <0.01 μM-1.0 μM.

IT 422518-12-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (sulfonylamino) (aminomethylidene) indolinones as cell proliferation inhibitors)

RN 422518-12-5 HCAPLUS

CN 2H-Indol-2-one, 1-acetyl-1,3-dihydro-5-[(phenylsulfonyl)amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

Ι

ACCESSION NUMBER: 2002:31423 HCAPLUS

DOCUMENT NUMBER: 136:102388

TITLE: Preparation of 2-(benzoazolidinylene)propane-1,3-dione

derivatives as GnRH receptor antagonists

INVENTOR(S):
Hirano, Masaaki; Kawaminami, Eiji; Toyoshima, Akira;

Moritomo, Hiroyuki; Seki, Norio; Wakayama, Ryutaro;

Okada, Minoru; Kusayama, Toshiyuki

PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

10690708.trn Page 53 11:48

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2002002533	A1 20020110	WO 2001-JP5813	20010704 <
W: AE, AG, AL	, AM, AT, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,
		DZ, EC, EE, ES, FI,	
GM, HR, HU	, ID, IL, IN, IS,	JP, KE, KG, KR, KZ,	LC, LK, LR, LS,
LT, LU, LV	, MA, MD, MG, MK,	MN, MW, MX, MZ, NO,	NZ, PL, PT, RO,
RU, SD, SE	, SG, SI, SK, SL,	TJ, TM, TR, TT, TZ,	UA, UG, US, UZ,
VN, YU, ZA	, ZW		
RW: GH, GM, KE	, LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZW,	AT, BE, CH, CY,
DE, DK, ES	, FI, FR, GB, GR,	IE, IT, LU, MC, NL,	PT, SE, TR, BF,
BJ, CF, CG	, CI, CM, GA, GN,	GW, ML, MR, NE, SN,	TD, TG
CA 2415010	AA · 20020110	CA 2001-2415010	20010704 <
AU 2001071022	A5 20020114	AU 2001-71022	20010704 <
EP 1300398	A1 20030409	EP 2001-949914	20010704
R: AT, BE, CH	, DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI, LT	, LV, FI, RO, MK,	CY, AL, TR	
US 2003191164	A1 20031009	US 2002-311688	20021219 <
US 6960591	B2 20051101		
US 2005267110	A1 20051201	US 2005-155595	20050620 <
PRIORITY APPLN. INFO.:		JP 2000-204425	A 20000705
		JP 2001-153372	A 20010523
		WO 2001-JP5813	W 20010704
		US 2002-311688	A3 20021219
OTHER SOURCE(S):	MARPAT 136:1023	88	

GΙ

Described are medicinal compns., in particular, gonadotropin releasing hormone (GnRH) receptor antagonists comprising propane-1,3-dione derivs. represented by the following general formula [I; R1 , R2, R3, R4 = H,NO2, cyano, halo, (un)substituted hydrocarbyl, heterocyclyl, OH, CO2H, acyloxy, or acyl, substituent-S(O)n, H-S(O)n (wherein n = an integer of 0-2), (un)substituted CONH2, SO2NH2, or NH2; or two adjacent groups selected from R1-R4 are taken together to form aryl or cycloalkenyl; R5, R6 = H, halo, (un)substituted hydrocarbyl or NH2; X1, X2 = N, S, O; A, B = (un)substituted aryl or heterocyclyl; Z1, Z2, Z3, Z4 = C, N; provided that (1) when X1 and X2 are S or O, both or one of R5 and R6 is absent or (2) when 1 to 4 of Z1, Z2, Z3, and /or Z4 is N, the corresponding R1, R2, R3, and/or R4 is absent.] as the active ingredient. These compds. I are nonpeptide compds. having a GnRH antagonism and lowering sex hormone and are useful for the treatment of sex hormone-dependent diseases such as prostate cancer, breast cancer, endometriosis, and hysteromyoma. Thus,

10690708.trn

K2CO3 and NaI were successively added to a son. of 1-(3,5-difluorophenyl)-2-(5-hydroxy-1,3-dihydro-2H-benzimidazol-2-ylidene)-3-phenylpropane-1,3-dione (preparation given) and 3-chloromethylpyridine hydrochloride in MeCN and stirred at 80° for 3.5 h to give 1-(3,5-difluorophenyl)-2-[5-(3-pyridylmethoxy)-1,3-dihydro-2H-benzimidazol-2-ylidene]-3-phenylpropane-1,3-dione (II). II and 24 other compds. I in vitro showed IC50 of 10-10 to 10-9 M for inhibiting the binding of 125I-D-Trp6-LHRH to human GnRH receptor. In particular, 2-(dihydrobenzoimidazol-2-ylidene)propane-1,3-dione derivs. exhibited the GnRH receptor-inhibitory activity equivalent to that of the peptide GnRH antagonist cetrorelix.

IT 388596-43-8P 388596-44-9P 388596-45-0P 388596-46-1P 388599-22-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 $(preparation\ of\ (benzoazolidinylene)\ propanedione\ derivs.\ as\ GnRH\ receptor\ antagonists\ for\ treating\ sex\ hormone-dependent\ diseases)$

RN 388596-43-8 HCAPLUS

CN Acetamide, N-[4-[[[2-[1-benzoyl-2-(3,5-difluorophenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 388596-44-9 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-(3,5-difluorobenzoyl)-2-(3-methylphenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 388596-45-0 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-(3,5-difluorobenzoyl)-2-(4-fluorophenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4-methoxy-(9CI) (CA INDEX NAME)

RN 388596-46-1 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-(3,5-difluorobenzoyl)-2-(2-methoxyphenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-3-(trifluoromethyl)-(9CI) (CA INDEX NAME)

RN 388599-22-2 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-benzoyl-2-(3,5-difluorophenyl)-2-oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-N,4-dimethyl- (9CI) (CA INDEX NAME)

IT 388600-59-7, N-[2-[1-Benzoyl-2-(3,5-difluorophenyl)-2oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4-

methylbenzenesulfonamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (benzoazolidinylene)propanedione derivs. as GnRH receptor antagonists for treating sex hormone-dependent diseases)

RN 388600-59-7 HCAPLUS

CN Benzenesulfonamide, N-[2-[1-benzoyl-2-(3,5-difluorophenyl)-2-

10690708.trn

Page 56

oxoethylidene]-2,3-dihydro-1H-benzimidazol-5-yl]-4-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:581738 HCAPLUS

DOCUMENT NUMBER:

135:175421

TITLE:

Integrin expression inhibitors

INVENTOR (S): Wakabayashi, Toshiaki; Funahashi, Yasuhiro; Hata,

> Naoko; Semba, Taro; Yamamoto, Yuji; Haneda, Toru; Owa, Takashi; Tsuruoka, Akihiko; Kamata, Junichi; Okabe, Tadashi; Takahashi, Keiko; Nara, Kazumasa; Hamaoka,

Shinichi; Ueda, Norihiro

PATENT ASSIGNEE(S):

Eisai Co., Ltd., Japan PCT Int. Appl., 153 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
		WO 2001-JP713 NO, NZ, RU, US	20010201 <			
RW: AT, BE, CH, PT, SE, TR	CY, DE, DK, ES,	FI, FR, GB, GR, IE, IT	, LU, MC, NL,			
CA 2399001	AA 20010809	CA 2001-2399001	20010201 <			
AU 2001028867	A5 20010814	AU 2001-28867	20010201 <			
AU 781506	B2 20050526					
EP 1258252	A1 20021120	EP 2001-948941	20010201 <			
		GB, GR, IT, LI, LU, NL	, SE, MC, PT,			
IE, FI, CY,		VIII 0001 50000				
NZ 520299	A 20040528					
RU 2240826						
US 2004018192	A1 20040129	US 2002-181562	20020718 <			
NO 2002003688	A 20021003	NO 2002-3688	20020802 <			
US 2005176712	A1 20050811	US 2005-97218	20050404 <			
PRIORITY APPLN. INFO.:		JP 2000-26080	A 20000203			
		JP 2000-402084	A 20001228			
		WO 2001-JP713	W 20010201			
		US 2002-181562	A1 20020718			
OTHER SOURCE(S):	MARPAT 135:17542	21				

Integrin expression inhibitors and remedies for arteriosclerosis, psoriasis, cancer, retinal angiogenesis, diabetic retinitis or

10690708.trn

Page 57

inflammatory diseases, anticoagulant agents and cancerous metastasis inhibitors based on the integrin inhibitory effect. Namely, integrin expression inhibitors containing as the active ingredient sulfonamide compds. represented by the following general formula BKSO2N(R1)ZR, pharmacol. acceptable salts thereof or hydrates of the same wherein B represents optionally substituted C6-10 aryl or 6- to 10-membered heteroaryl wherein the ring may be partly saturated; K represents a single bond, -CH=CH- or -(CR4bR5b)mb- (wherein R4b and R5b may be the same or different and each represents hydrogen or C1-4 alkyl; and mb represents an integer of 1 or 2); R1 represents hydrogen or C1-6 alkyl; Z represents a single bond or CO-NH-; and R represents optionally substituted C6-10 aryl or 6- to 10-membered heteroaryl wherein the ring may be partly saturated

IT 165668-28-0P

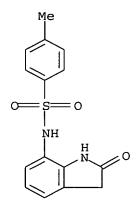
CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(integrin expression inhibitors for medical uses)

RN 165668-28-0 HCAPLUS

Benzenesulfonamide, N-(2,3-dihydro-2-oxo-1H-indol-7-yl)-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:338351 HCAPLUS

DOCUMENT NUMBER:

134:340508

TITLE:

Preparation of 2-benzyl and 2-heteroaryl benzimidazole

NMDA/NR2B antagonists

INVENTOR(S):

McCauley, John A.; Theberge, Cory R.; Liverton, Nigel

J.; Claremon, David A.; Claiborne, Christopher F.

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE:

PCT Int. Appl., 80 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

10690708.trn

Page 58

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CP, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                                        US 2000-696501
           JS 6316474
                                                    B1
                                                                 20011113
                                                                                                                                        20001025 <--
                2389259
                                                                 20010510
                                                                                        CA 2000-2389259
                                                                                                                                       20001026 <--
                                                    AA
                                                                                        EP 2000-975393
          EP 1242076
                                                    Α1
                                                                 20020925
                                                                                                                                       20001026 <--
                  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                          IE, SI, LT, LV, FI, RO, MK, CY, AL
                                                                 20030408
                                                                                         JP 2001-534379
          JP 2003513041
                                                    T2
                                                                                                                                        20001026
PRIORITY APPLN. INFO.:
                                                                                         US 1999-162351P
                                                                                                                                 Ρ
                                                                                                                                       19991029
                                                                                         WO 2000-US29470
                                                                                                                                 W 20001026
OTHER SOURCE(S):
                                                  MARPAT 134:340508
GI
```

$$R^2$$
 N
 R^3
 R^4
 R^4

AB Novel benzimidazoles, substituted in the 2-position by substituted benzyl groups or heteroaryl groups, (I) [wherein R1, R2, R4, and R5 = independently H, Cl, F, OH, OMe, CF3, OCF3, NH2, CN, NO2, (amino)alkyl, aryl, alkylcarbonylamino, oxohydroxydibenzopyranyl-substituted carboxyphenylthioureido or carbonylaminoalkylcarbonylamino, R6SO2NH, R6SO2NMe, or R6SO2NHCH2; R3 = H, OH, NH2, alkylamino, arylamino, or :O; R6 = (un)substituted alkyl, (phenyl)alkenyl, Ph, naphthyl, or heterocyclic group; Y = O, NH, (CH2)nCO(CH2)n, or (CH2)nCHR3(CH2)n; n = 0-5; Ar may be substituted with 0-3 N atoms in positions 2, 3, 5, or 6] were prepared as effective NMDA NR2B glutamate receptor antagonists. For example, cycloaddn. of phenylenediamine and (4-phenoxyphenyl)acetic acid in presence of EDC and HOBt in DMF afforded 2-(4-phenoxybenzyl)-1H-benzimidazole. Exptl. protocols for assessing the inhibition of NR1A/2B NMDA receptor activation (FLIPR assay) and determining the apparent dissociation

consts. against the human NR1A/NR2B receptor (binding assay) are given (no data). I are useful for relieving pain and treating depression, schizophrenia, Parkinson's disease, or stroke (no data).

IT 337965-02-3P 337965-03-4P 337965-05-6P 337965-07-8P 337965-09-0P 337965-11-4P 337965-13-6P 337965-15-8P 337965-17-0P 337965-19-2P 337965-21-6P 337965-23-8P

CN

337965-25-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2-benzyl and 2-heteroaryl benzimidazole NMDA/NR2B

antagonists by cycloaddn. of phenylenediamines with arylacetates)

RN337965-02-3 HCAPLUS

> Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-(9CI) (CA INDEX NAME)

RN 337965-03-4 HCAPLUS

CNBenzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-02-3 C26 H21 N3 O3 S CMF

CM2

CRN 76-05-1 CMF C2 H F3 O2

RN337965-05-6 HCAPLUS

CN Benzenesulfonamide, 2-methyl-N-[2-[(4-phenoxyphenyl)methyl]-1Hbenzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME) 03/24/2006 10690708.trn

CM 1

CRN 337965-04-5

CMF C27 H23 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-07-8 HCAPLUS CN Benzenesulfonamide, 3

Benzenesulfonamide, 3-methyl-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-06-7 CMF C27 H23 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

03/24/2006 10690708.trn

RN 337965-09-0 HCAPLUS

CN Benzenesulfonamide, 4-methyl-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-08-9 CMF C27 H23 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-11-4 HCAPLUS

CN Benzenesulfonamide, 3-chloro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-10-3

CMF C26 H20 C1 N3 O3 S

$$C1$$
 S
 NH
 N
 CH_2
 OPh

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-13-6 HCAPLUS

CN Benzenesulfonamide, 4-chloro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-12-5

CMF C26 H20 Cl N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-15-8 HCAPLUS

CN Benzenesulfonamide, 2-fluoro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-14-7

CMF C26 H20 F N3 O3 S

03/24/2006 10690708.trn

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F-C-CO₂H

RN 337965-17-0 HCAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-16-9 CMF C26 H20 F N3 O3 S

F OPP

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F-C-CO₂H

RN 337965-19-2 HCAPLUS

CN Benzenesulfonamide, 4-methoxy-N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-18-1 CMF C27 H23 N3 O4 S

$$\begin{array}{c|c} \text{MeO} & \text{O} \\ \hline \\ \text{S} & \text{NH} \\ \hline \\ \text{O} \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-21-6 HCAPLUS

CN Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-2-(trifluoromethoxy)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-20-5

CMF C27 H20 F3 N3 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 337965-23-8 HCAPLUS

CN Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-2-(trifluoromethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

10690708.trn

Page 65

03/24/2006 10690708.trn

CRN 337965-22-7 CMF C27 H20 F3 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN

RN 337965-25-0 HCAPLUS

Benzenesulfonamide, N-[2-[(4-phenoxyphenyl)methyl]-1H-benzimidazol-5-yl]-4-(trifluoromethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 337965-24-9

CMF C27 H20 F3 N3 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

10690708.trn

Page 66

3

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:790487 HCAPLUS

DOCUMENT NUMBER:

133:335229

TITLE:

GI

Preparation of benzoxazole compounds, process for the

preparation thereof and herbicides

INVENTOR(S):

Fukuda, Shohei; Nakamura, Akira; Shimizu, Motohisa;

Okada, Tatsuo; Asahara, Takehiko; Oohida, Satoshi

PATENT ASSIGNEE(S):

SOURCE:

Ube Industries, Ltd., Japan PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		APPLICATION NO.	DATE
WO 2000066569	A1 20001109	WO 2000-JP2760	20000427 <
W: BR, CA, CN,	TM IIC		
	•		
, , ,	CY, DE, DK, ES,	FI, FR, GB, GR, IE, I	T, LU, MC, NL,
PT, SE			
CA 2371681	AA 20001109	CA 2000-2371681	20000427 <
JP 2001011061	A2 20010116	JP 2000-126933	20000427 <
BR 2000010703	A 20020219	BR 2000-10703	20000427 <
	A1 20020220	EP 2000-921051	20000427 <
EP 1180515	B1 20040414		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, N	IL, SE, MC, PT,
IE, FI			
AT 264314	E 20040415	AT 2000-921051	20000427
ES 2219332	T3 20041201	ES 2000-921051	20000427
US 6706664	B1 20040316	US 2001-959544	20011030 <
PRIORITY APPLN. INFO.:		JP 1999-124912	A 19990430
		WO 2000-JP2760	W 20000427
OTHER SOURCE(S):	MARPAT 133:3352	29	

$$R^{2}$$
 R^{3}
 R^{4}
 R^{7}
 $CH-X$
 R^{6}
 R^{7}
 R^{6}
 R^{7}
 R^{5}
 R^{5}

AB Claimed are benzoxazole compds. represented by general formula (I; wherein R1 to R4 are each hydrogen, C1-6 alkyl, C1-4 alkoxy, C1-4 haloalkyl, C1-4 haloalkoxy, halogeno, nitro, cyano, or the like; R5 is C1-4 haloalkyl, C1-4 haloalkoxy, halogeno, nitro, cyano, or the like; R6 is hydrogen, halogeno, cyano, nitro, or the like; R7 is hydrogen, C1-6 alkyl, C1-4 haloalkyl, or the like; and X is O, S, SO, or SO2); process for the preparation of them; and herbicides containing the same as the active ingredient. Thus, chlorination of 2-[4-fluoro-3-(trifluoromethyl)phenoxy]butanoic acid with SOC12 under reflux for 2 h gave 2-[4-fluoro-3-

10690708.trn

(trifluoromethyl)phenoxy]butanoyl chloride which underwent cyclocondensation with 2-amino-4-fluorophenol in AcOH at 50-60° for 1 h to give 1-(5-fluorobenzoxazol-2-yl)-1-[4-fluoro-3-(trifluoromethyl)phenoxy]propane (II). II at 500 g/ha (preemergent soil-treatment) completely controlled Digitaria ciliaris, Echinochloa crus-galli, Setaria viridis, and Poa annua and gave no damage to corn, soy bean, cotton, and wheat plants.

IT 303183-23-5P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzoxazole compds., process for preparation thereof and herbicides)

RN 303183-23-5 HCAPLUS

Benzenesulfonamide, N-[2-[1-[4-fluoro-3-(trifluoromethyl)phenoxy]propyl]-5-benzoxazolyl]-4-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:819384 HCAPLUS

DOCUMENT NUMBER:

132:64058

TITLE:

CN

Preparation and antitumor activity of

arylsulfonanilide phosphates

INVENTOR(S):

Houze, Jonathan B.

PATENT ASSIGNEE(S): SOURCE:

Tularik Inc., USA PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE				APPLICATION NO.					DATE			
WO	9967	258			A1	-	1999:	1229	1	WO 1:	999-1	US13	759		1	9990	516 <
	W:	ΑE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
		TM,	TR,	TT,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,
		RU,	ТJ,	TM													
	RW:	GH,															
										MC,			SE,	BF,	ВJ,	CF,	CG,
		CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG					
	2335				AA		1999	1229	1	CA 1	999-:	2335!	559		1	9990	516 <
	9945				A1					AU 19	999-	4576	3		1	9990	516 <
AU 763687 B2 2003																	
EP 1090014				A1		2001	0411		EP 19	999-	9287	77		1:	9990	516 <	

10690708.trn

Page 68

20030903 EP 1090014 B1R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2002518506 T2 20020625 JP 2000-555910 19990616 <--AT 248845 E 20030915 AT 1999-928777 19990616 20000614 <--US 6211167 В1 20010403 US 2000-595398 US 2001018430 **A1** 20010830 US 2001-779419 20010207 <--US 6417176 B2 20020709 PRIORITY APPLN. INFO.: US 1998-90681P Ρ 19980625 W WO 1999-US13759 19990616 US 1999-336062 B1 19990618 US 2000-595398 A1 20000614

OTHER SOURCE(S):

MARPAT 132:64058

GI

AB The title compds. I [R1 = H, alkyl, heteroalkyl; R2, R3 = H, halo, alkyl, etc.; R2 and R3 when attached to adjacent C atoms can form a ring; R4, R5 = H, alkyl, aryl, etc.; Ar = substituted Ph] were prepared and their antitumor activity assessed. E.g., 5-(pentafluorophenylsulfonamido)-2methoxyphenyl phosphate was prepared

ΙT 253141-42-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and antitumor activity of arylsulfonanilide phosphates)

RN253141-42-3 HCAPLUS

CNBenzenesulfonamide, 2,3,4,5,6-pentafluoro-N-[7-(phosphonooxy)-1Hbenzimidazol-5-yl]- (9CI) (CA INDEX NAME)

Ι

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2006 ACS on STN L24 ANSWER 11 OF 31 ACCESSION NUMBER: 1999:505930 HCAPLUS

10690708.trn

Page 69

```
131:157761
DOCUMENT NUMBER:
                            5-Membered heterocyclic condensed benzo derivatives,
TITLE:
                            their preparation, and their use as drugs
Ries, Uwe; Hauel, Norbert; Mihm, Gerhard; Priepke,
INVENTOR(S):
                            Henning; Binder, Klaus; Stassen, Jean Marie; Wienen,
                            Wolfgang; Zimmermann, Rainer
                            Boehringer Ingelheim Pharma K.-G., Germany
PATENT ASSIGNEE(S):
                            Ger. Offen., 94 pp.
SOURCE:
                            CODEN: GWXXBX
DOCUMENT TYPE:
                            Patent
LANGUAGE:
                            German
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                            KIND
                                    DATE
                                                 APPLICATION NO.
                            ____
                                    19990805 DE 1998-19804085 19980203 <--
     DE 19804085
                            A1
     CA 2319494
                            AA
                                    19990812
                                                 CA 1999-2319494
     WO 9940072
                            A1
                                    19990812
                                              WO 1999-EP537
                                                                          19990128 <--
          W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
              KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
         MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                              AU 1999-27201
     AU 9927201
                            A1
                                    19990823
                                                                           19990128 <--
     EP 1060166
                                                 EP 1999-907437
                            A1
                                    20001220
                                                                           19990128 <--
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
     JP 2002502844
                            T2
                                    20020129
                                                 JP 2000-530502
                                                                            19990128 <--
     US 6114532
                             Α
                                    20000905
                                                 US 1999-243200
                                                                            19990202 <--
PRIORITY APPLN. INFO.:
                                                 DE 1998-19804085
                                                                        A 19980203
                                                 US 1998-77694P
                                                                        Ρ
                                                                           19980312
                                                                        Α
                                                 DE 1998-19834325
                                                                           19980730
                                                                        W 19990128
                                                 WO 1999-EP537
                           MARPAT 131:157761
OTHER SOURCE(S):
     Approx. 300 antithrombotic title compds. such as 4-[5-[N-(8-
     quinolylsulfonyl)-N-(carboxymethyl)amino]-1-methyl-1H-benzimidazol-2-
     ylmethyl]benzamidine hydrochloride (I), 4-[5-[N-(benzenesulfonyl)-N-[2-
     (dimethylamino) ethyl]amino]-1-benzyl-1H-benzimidazol-2-
     ylmethyl]benzamidine dihydrochloride, 4-[5-[N-(3-carboxypropionyl)-N-
     (cyclopentyl)amino]-1-methyl-1H-benzimidazol-2-ylmethyl]benzamidine
     hydrochloride (II), and 4-[5-[N-(8-quinolylsulfonyl)-N-
     (carboxymethyl)amino]-1-methyl-1H-benzothiazol-2-ylmethyl]benzamidine
     hydrochloride were prepared by standard methods. The ED200 in \mu M for I was
     0.92 and for II was 0.82. Formulations for the antithrombotics were
     given.
TT
     237750-73-1 237750-74-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (preparation and antithrombotic activity of benzimidazolylmethylbenzamidines
RN
     237750-73-1 HCAPLUS
CN
     Benzenesul fonamide, N-[2-[(4-cyanophenyl)methyl]-1H-benzimidazol-5-yl]-
```

(9CI) (CA INDEX NAME)

RN 237750-74-2 HCAPLUS

CN Benzenesulfonamide, N-[2-[(4-cyanophenyl)methyl]-7-methyl-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

IT 236418-28-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and antithrombotic activity of benzimidazolylmethylbenzamidines)

RN 236418-28-3 HCAPLUS

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$$

IT 236414-29-2P 236414-31-6P 236416-84-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and antithrombotic activity of benzimidazolylmethylbenzamidines

RN 236414-29-2 HCAPLUS

CN Benzenecarboximidamide, 4-[[5-[(phenylsulfonyl)amino]-1H-benzimidazol-2-yl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & NH \\ & \\ & \\ Ph-S-NH \\ & \\ O \end{array}$$

● HCl

RN 236414-31-6 HCAPLUS

CN Benzenecarboximidamide, 4-[[4-methyl-6-[(phenylsulfonyl)amino]-1H-benzimidazol-2-yl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \text{NH} \\ & & & \\$$

● HCl

RN 236416-84-5 HCAPLUS CN Benzenecarboximidamic

Benzenecarboximidamide, 4-[[5-[(phenylsulfonyl)amino]-2-benzoxazolyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
& & & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& &$$

HCl

L24 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:35065 HCAPLUS

DOCUMENT NUMBER: 130:110166

Preparation of amidinophenylpropionyltetrahydroquinoli TITLE:

nes and related compounds as antithrombotics. Heckel, Armin; Soyka, Rainer; Grell, Wolfgang; Haaksma, Eric; Binder, Klaus; Zimmermann, Rainer

Boehringer Ingelheim Pharma K.-G., Germany PATENT ASSIGNEE(S):

Ger. Offen., 50 pp. SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

INVENTOR (S):

LANGUAGE:

Patent German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: DATENT NO

PA'	PATENT NO.						APPLICATION NO.					DATE						
	1972	7117			A1						1997 <i>-</i>							
	2288										1998-							
WO	9900	-								-	1998-							
	W :										, BY,							
		DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	GM,	GW	, HU,	ID,	ΙL,	IS,	JP,	KΕ,	KG,	
		ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU	, LV,	MD,	MG,	MK,	MN,	MW,	MX,	
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG	, SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	
		UA,	UG,	US,	UZ,	VN	YU,	ZW,	AM,	AZ	, BY,	KG,	KZ,	MD,	RU,	TJ,	TM	
	RW:										, AT,							
											, PT,							
							NE,					0_,	,	,	- ,		- ,	
7.11	9887										1998-	8727	9		1	9980	622	
											1998-							
	9916									Ľ F	1770-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	21		Δ.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	022	
EP										an.	T. (1)	т т	T 11	NTT	C E	MC	חחת	
	к:			CH,	DE,	DK,	ES,	PK,	GB,	GR	, IT,	ш,	LU,	иL,	SE,	MC,	Ρ1,	
		IE,													_			
JP	2002	5110	88		T2						1999-							<
	2546				Ē		2003	1215		$\mathbf{T}\mathbf{A}$	1998-	9386:	21		1:	9980	622	
MX	9911	261			Α		2000	0630	j	MX	1999-	1126	1		1:	9991:	206	<
US	6300	342			В1		2001	1009	1	US	1999-	4579	61		1:	9991:	209	<
PRIORIT	Y APP	LN.	INFO	. :						DE	1997-	1972	7117		A 1:	9970	626	
									1	OW	1998-	EP38	00	1	W 1:	9980	622	
OTHER SO	OURCE	(S):			MARI	TAS	130:	1101	66									

AB Title compds. [I; Ra = H, NO2, amino, aminocarbonyl; Rb = cyano, aminomethyl, (substituted) amidino; Rc, Rd = H, F, Cl, Br, iodo, Me, MeO, NO2, amino; A = (substituted) ethylene, ethyenylene, propylene, etc.; B = bond, (substituted) methylene, ethylene, ethenylene, propylene, etc.; W = N, CH; Y = CH2, CO, CS], were prepared Thus, 1-[3-(4amidinophenyl)propionyl]-1,2,3,4-tetrahydroquinoline-6-carboxylic acid

GI

03/24/2006

10690708.trn

methyl-N-phenylamide (preparation given) had a thrombin time ED200 = 0.02 $\mu M\,.$

IT 219643-32-0P 219644-16-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylpropionyltetrahydroquinolines and related compds. as antithrombotics)

RN 219643-32-0 HCAPLUS

CN 1H-Indol-5-amine, 1-[3-(4-cyanophenyl)-1-oxopropyl]-2,3-dihydro-N-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

RN 219644-16-3 HCAPLUS

CN 1H-Indol-5-amine, 1-[3-[4-(aminoiminomethyl)phenyl]-1-oxopropyl]-2,3-dihydro-N-(phenylsulfonyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH & NH \\ Ph-S-NH & O & C-NH_2 \\ \hline O & N-C-CH_2-CH_2 \\ \end{array}$$

● HCl

L24 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:682229 HCAPLUS

DOCUMENT NUMBER:

129:302552

TITLE:

Preparation of 1,4-disubstituted cyclic amine

derivatives as serotonin antagonists

INVENTOR(S):

Kitazawa, Noritaka; Ueno, Kohshi; Takahashi, Keiko; Kimura, Teiji; Sasaki, Atsushi; Kawano, Koki; Okabe, Tadashi; Komatsu, Makoto; Matsunaga, Manabu; Kubota,

Atsuhiko

PATENT ASSIGNEE(S):

Eisai Co., Ltd., Japan PCT Int. Appl., 635 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

. 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 9843956 A1 19981008 WO 1998-JP1481 19980331 <--

10690708.trn

Page 74

	RW:	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	RU, GR,	ΙE,						
	2280										L998-2							
AU	98652	209			A1		1998	1022	I	4U]	L998-6	5520	9		1	9980:	331	<
AU	74803	38					2002											
ZA	98027	707			Α		1999	1020			1998-2							
EP	97673	32			A1		2000	0202	E	EP]	L998-9	91113	37		1	9980:	331	<
EP	97673	32			B1		2004	1124										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	•		IT,						-	
NZ	33765	51			Α		2002	0426			L998-3							<
RU	22032	275			C2		2003	0427	F	3U]	L999-1	1230	39		1	9980:	331	
AT	28325	59			E		2004	1215	I	T/	L998-9	91113	37		1	9980	331	
ES	22306	581					2005	0501	F	$\mathbf{E}\mathbf{S}$ 1	L998-9	91113	37		1	9980:	331	
US	64482	243			B1		2002	0910	ζ	JS 1	L999-3	3672	27		1	9990	811	<
NO	9904	720			Α		1999	1130	1	10]	L999-4	1720			1	9990:	928	<
NO	31454	13			В1		2003	0407		•								
HK	10267	700			A1		2005	0826	F	HK 2	2000-3	1058	71		2	0000:	919	
US	20020	08699	99		A1		2002	0704	Ţ	JS 2	2001-8	3462	59		2	0010	502	<
US	20020	01953	31		A1		2002	0214	ζ	JS 2	2001-8	3595	17		2	0010	518	<
US	65798	381			B2		2003	0617										
PRIORITY	APPI	_N	INFO	. :					Ċ	JP 1	L997-9	98433	3	1	A 1	9970	331	
									i	JP 1	1997-3	36676	54	1	A 1	9971:	226	
									V	1O 1	1998-0	JP148	31	Ţ	<i>N</i> 1	9980	331	
									τ	JS 1	1999-3	36722	27	i	A3 1	9990	811	
OMITTED OF	TTD OF	/ C \			343 D F	3 M	100	2025										

OTHER SOURCE(S):

MARPAT 129:302552

GI

The title compds. (I; A, B, C, D, T, Y, and Z each represents a methine group or a nitrogen atom; R1, R2, R3, R4, and R5 each represents a substituent, such as halo, OH, hydroxyalkoxy, lower alkyl, etc.; n is an integer of 0 to 3; m is an integer of 0 to 6; and p is an integer of 1 to 3; dotted bond represents a single or double bond) are prepared I have serotonin antagonism and serve as drugs for the treatment, alleviation and prevention of spastic paralysis or a central muscle relaxant for alleviating myotonia. Thus, indoline was reacted with 1-(4-fluorophenyl)-4-piperidone in the presence of NaB(OAc)3 in AcOH and dichloroethane to give 63% the title compound (II), which showed binding activity of 623.94 and > 200 nM for 5HTla and 5HT2 resp.

IT 214611-39-9P 214612-56-3P 214612-57-4P 214616-20-3P 214617-24-0P 214617-25-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1,4-disubstituted cyclic amine derivs. as serotonin antagonists)

RN 214611-39-9 HCAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-2,3-dihydro-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 214612-56-3 HCAPLUS

CN Benzenesulfonamide, N-[2,3-dihydro-1-(1-methyl-4-piperidinyl)-1H-indol-6-yl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 214612-57-4 HCAPLUS

CN Benzenesulfonamide, N-[1-(1-ethyl-4-piperidinyl)-2,3-dihydro-1H-indol-6-yl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 214616-20-3 HCAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-2,3-dihydro-1H-indol-6-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 214617-24-0 HCAPLUS

CN Benzenesulfonamide, N-[2,3-dihydro-1-(1-methyl-4-piperidinyl)-1H-indol-6-yl]-4-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 214617-25-1 HCAPLUS

CN Benzenesulfonamide, N-[1-(1-ethyl-4-piperidinyl)-2,3-dihydro-1H-indol-6-yl]-4-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

IT 214615-14-2P

10690708.trn

Page 77

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1,4-disubstituted cyclic amine derivs. as serotonin antagonists)

RN 214615-14-2 HCAPLUS

CN Benzenesulfonamide, N-(2,3-dihydro-lH-indol-6-yl)-4-fluoro- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:479027 HCAPLUS

DOCUMENT NUMBER: 129:122673

TITLE: Fibrinogen receptor antagonists

INVENTOR(S): Wai, John; Fisher, Thorsten E.; Duggan, Mark E.;

Hartman, George D.; Perkins, James J.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 37 pp.

CODEN: USXXAM DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5780480	A	19980714	US 1997-807843	19970226 <
PRIORITY APPLN. INFO.:			US 1997-807843	19970226
OTHER SOURCE(S):	MARPAT	129:122673		

The title compds. [I; XA = N-containing heterocyclyl; Y = CONH, (CH2)m, etc.; m = 2, 3; n = 0, 1; Z = 1.4-Ph, N-containing heterocyclyl] are prepared I are useful as fibrinogen receptor antagonists and inhibitors of the aggregation of blood platelets in a mammal (no data). Thus, compound (II; W = BOC, Q = Me) (preparation given) was treated with 1N NaOH and then treated with TFA to give the title compound II (W = Q = H).

IT 210347-32-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzene derivs. as fibrinogen receptor antagonists)

RN 210347-32-3 HCAPLUS

Glycine, N-[2,3-dihydro-1-[4-(1-piperazinyl)benzoyl]-1H-indol-5-yl]-N-(phenylsulfonyl)-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 196204-10-1 CMF C27 H28 N4 O5 S

$$\begin{array}{c} 0 \\ Ph-S = 0 \\ HO_2C-CH_2-N \\ \hline \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 196204-09-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzene derivs. as fibrinogen receptor antagonists)

RN 196204-09-8 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[4-[[2,3-dihydro-5-[(phenylsulfonyl)amino]-1H-indol-1-yl]carbonyl]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10690708.trn

Page 79

L24 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:713785 HCAPLUS

DOCUMENT NUMBER: 123:111849

TITLE: Preparation of bicyclic heterocyclic sulfonamide and

sulfonic ester derivatives as antitumor agents

INVENTOR (S):

Yoshino, Hiroshi; Yamato, Takashi; Okauchi, Tatsuo; Yoshimatsu, Kentaro; Sugi, Naoko; Nagasu, Takeshi;

Ozawa, Yoichi; Koyanagi, Nozomu; Kito, Kyosuke

Eisai Co., Ltd., Japan PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	rent no.			KIND	DATE	APPLICATION	NO.	DATE	
						WO 1994-JP			<
	W - ∆11	$C\Delta$	CN	FT HI	KP NO	NZ DII IIC			
	RW: AT	BE,	CH,	DE, DK	. ES. FR.	GB, GR, IE, I	C. LU. MC.	NL. PT. SE	•
JP	07165708	3	•	A2	19950627	JP 1994-201 AU 1994-762	7568	19940831	<
JP	3545461			B2	20040721				
UA	9476237			A1	19950327	AU 1994-762	237	19940908	<
AU	683492			B2	19971113				
EP	673937			A1	19950927	EP 1994-926	5372	19940908	<
מיד	672027			D 1	20021126				
	R: AT,	BE,	CH,	DE, DK	, ES, FR,	GB, GR, IE, IT HU 1995-136 CN 1994-190 RU 1996-113 RU 1995-112 HU 1996-214	r, LI, LU,	NL, PT, SE	
HU	71551			A2	19951228	HU 1995-136	53	19940908	<
CN	1114506			Α	19960103	CN 1994-190)672 ·	19940908	<
CN	1079097			В	20020213				
RU	2121997			C1	19981120	RU 1996-119	9782	19940908	<
RU	2128648			C1	19990410	RU 1995-112	2848	19940908	<
HU	217842			В	20000428	HU 1996-214	<u> 1</u> 7	19940908	<
AT	217842 255106			Ė	20031215	AT 1994-926 CN 2001-200	372	19940908	
CN	1491941			A	20040428	CN 2001-200	1119456	19940908	
PT	673937 2206469 9501813			T	20040430	PT 1994-926	5372	19940908	
ES	2206469			Т3	20040516	ES 1994-926 NO 1995-181 FI 1995-227	372	19940908	
ИО	9501813			Α	19950509	NO 1995-181	13	19950509	<
FI	9502272			A	19950706	FI 1995-227	72	19950510	<
FI	109690			B1	20020930				
US	5721246			Α	19980224	US 1995-433	3493	19950510	<
UA	9717785 711438			A1	19970814	AU 1997-177	785	19970409	<
AU	711438			B2	19991014				
PRIORITY	Y APPLN.	INFO.	. :			JP 1993-248	3614 A	19930910	
						JP 1994-207 HU 1995-136	7568 A	19940831	
						HU 1995-136	3 A	19940908	
						WO 1994-JPI	.487 W	19940908	
OTHER SO	OURCE(S):	:		MARPAT	123:1118	. 9			

OTHER SOURCE(S): MARPAT 123:111849

GI For diagram(s), see printed CA Issue.

AB Novel bicyclic heterocyclic sulfonamide and sulfonic ester derivs. represented by general formula [I; ring A = (un) substituted mono- or bicyclic aromatic group; ring B = (un) substituted 6-membered unsatd.hydrocarbon ring or 6-membered unsatd. heterocyclic group containing one N atom; ring C = (un)substituted 5-membered heterocyclic group containing one or two N atoms; W = a single bond or CH:CH; X = NR1 or O; Y = C or N; Z = NR2 or N; wherein R1, R2 = H, lower alkyl] or pharmacol. acceptable salts thereof, having an antitumor activity with reduced toxicity, are prepared Thus, 1.50 g 7-amino-1H-indole (preparation given) was dissolved in 40 mL

pyridine followed by adding 2.57 g 4-nitrobenzenesulfonyl chloride and the mixture was stirred at room temperature overnight to give, after silica gel chromatog., 3.50 g 7-(phenylsulfonylamino)indole derivative (II; X1 = NO2, R = H). 50 7-(Phenylsulfonylamino)indole derivs. in vitro showed IC50 of $0.09-0.87 \mu g/mL$ for inhibiting the proliferation of mouse colon 38 cancer cells. I (X1 = MeSO2NH, R = Cl) at 100 mg/kg i.p. per day for 4 consecutive days inhibited 97% the growth of human colon cancer HCT116 cells transplanted in mice 21 days after the administration and gave 100% survival rate for the animals.

TT 165668-28-0P

RN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (phenylsulfonylamino) indole derivative as antitumor agents) 165668-28-0 HCAPLUS

CN Benzenesulfonamide, N-(2,3-dihydro-2-oxo-1H-indol-7-yl)-4-methyl- (9CI) (CA INDEX NAME)

L24 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:557641 HCAPLUS

DOCUMENT NUMBER:

121:157641

TITLE:

INVENTOR(S):

Substituted (aminosulfamoyl) benzimidazole pesticides Lunkenheimer, Winfried; Baasner, Bernd; Lieb, Folker;

Erdelen, Christoph; Wachendorff-Neumann, Ulrike;

Stendel, Wilhelm; Goergens, D. I. Ulrich

PATENT ASSIGNEE(S):

SOURCE:

Bayer A.-G., Germany Ger. Offen., 45 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
DE 4237597	A1 19940511	DE 1992-4237597	19921106 <
CA 2148605	AA 19940526	CA 1993-2148605	19931025 <
WO 9411350		WO 1993-EP2947	19931025 <
W: AU, BR, BY,	CA, CZ, HU, JP,	KR, KZ, NZ, RU, SK, UA,	US
		GB, GR, IE, IT, LU, MC,	
AU 9453378	A1 19940608	AU 1994-53378	19931025 <

E		57862 R: AT	D.C.	СП	A1	19950 DK, ES,		 1993-			יים סידי		19931025	<
	เบ 71		, DE,	CII,	A2	19960 20000	129	1995-	•	иц,	ΕΙ,		9931025	<
_ / J	P 08	3502983	3		B T2	19960	0402	1993-		44			9931025	
9	IS 55	307393 585395			A A	19990 1996:		1993- 1995-		56			19931025 19950424	
PRIOR F	TY	ĀPPLN.	INFO	.:				1992- 1993-			_	_	19921106 19931025	

OTHER SOURCE(S): MARPAT 121:157641 GI

$$X^{2}$$
 X^{3}
 X^{4}
 X^{2}
 X^{1}
 X^{2}
 X^{3}
 X^{4}
 X^{2}
 X^{3}
 X^{4}
 X^{2}
 X^{3}
 X^{4}
 X^{2}
 X^{3}
 X^{4}
 X^{5}
 X^{2}
 X^{1}
 X^{2}
 X^{3}
 X^{4}
 X^{5}
 X^{5

The title compds. [I; R1, R2 = H, alkyl, haloalkyl, cycloalkyl, (un)substituted aryl; R3 = fluoroalkyl; X1-X4 = H, halogen, CN, NO2, (un)substituted alkyl, alkoxy, alkylthiol etc.; >1 of X1-X4 = H], useful as pesticides, are prepared by the condensation of the aminosulfonyl halides with substituted benzamidazoles. Thus, 2,6-bis(trifluoromethyl)-4-bromo-1H-benzamidazole was condensed with ClSO2NMe2, producing 2,6-bis(trifluoromethyl)-4-bromo-1-(dimethylsulfamoyl)benzimidazole, m.p. 144-147°, in 58% yield.

IT 156493-93-5P 156493-94-6P 156493-95-7P 156494-09-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of pesticides)

RN 156493-93-5 HCAPLUS

CN Benzenesulfonamide, N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

RN 156493-94-6 HCAPLUS

CN Benzenesulfonamide, 2-chloro-N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]-(9CI) (CA INDEX NAME)

RN 156493-95-7 HCAPLUS

CN Benzenesulfonamide, 2-(trifluoromethyl)-N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

RN 156494-09-6 HCAPLUS

CN Benzoic acid, 2-[[[2-(trifluoromethyl)-1H-benzimidazol-5yl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

L24 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1994:508789 HCAPLUS

DOCUMENT NUMBER:

121:108789

TITLE:

Preparation of substituted benzimidazole derivs. for

use as pesticides

INVENTOR(S):

Lunkenheimer, Winfried; Baasner, Bernd; Lieb, Folker; Boehm, Stefan; Marhold, Albrecht; Goergens, Ulrich; Stendel, Wilhelm; Dehne, Heinz Wilhelm; Santel, Hans

CA 1993-2148612

19931025 <--

Joachim

PATENT ASSIGNEE(S):

Bayer A.-G., Germany Ger. Offen., 67 pp.

19940526

CODEN: GWXXBX

DOCUMENT TYPE:

LANGUAGE:

SOURCE:

Patent

German

AΑ

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

CA 2148612

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 4237557 A1 19940511 DE 1992-4237557 19921106 <--

10690708.trn

Page 83

```
WO 9411349
                            A1
                                   19940526
                                                WO 1993-EP2946
         W: AU, BR, BY, CA, CZ, HU, JP, KR, KZ, NZ, RU, SK, UA, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9453377
                                   19940608
                                                AU 1994-53377
                                                                          19931025 <--
                            Α1
     EP 667861
                            A1
                                   19950823
                                                 EP 1993-923545
                                                                          19931025 <--
     EP 667861
                            В1
                                   20000719
         R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE
     HU 72091
                                                                          19931025 <--
                            A2
                                   19960328
                                                HU 1995-1292
     JP 08506088
                                                                          19931025 <--
                            T2
                                   19960702
                                                 JP 1994-511643
     BR 9307389
                                                                          19931025 <--
                                   19990831
                                                BR 1993-7389
                            Α
     AT 194834
                                                AT 1993-923545
                                                                          19931025 <--
                            Ε
                                   20000815
     ES 2148242
                                                 ES 1993-923545
                                                                          19931025 <--
                            Т3
                                   20001016
                                                 PT 1993-923545
     PT 667861
                            Т
                                                                          19931025 <--
                                   20010131
     US 5656649
                                   19970812
                                                US 1995-428087
                            А
                                                                          19950525 <--
     US 5863933
                                   19990126
                                                US 1997-822565
                                                                          19970319 <--
                            А
PRIORITY APPLN. INFO.:
                                                 DE 1992-4237557
                                                                       A 19921106
                                                WO 1993-EP2946
                                                                       W 19931025
                                                 US 1995-428087
                                                                       A3 19950525
```

OTHER SOURCE(S): MARPAT 121:108789

$$X^2$$
 X^3
 X^4
 X^3
 X^4
 X^3
 X^3
 X^4
 X^3
 X^4
 X^3
 X^4
 X^4
 X^3
 X^4
 X^4

AB A process for the preparation of benzimidazoles of the general formula I wherein R1 can be H, alkyl, alkoxy, or substituted aryl and R2 can be OH, CN, or alkyl, aryl, alkenyl, amino, alkoxycarbonyl, etc. and R3 is fluoroalkyl and X1, X2, X3 are independently H, halogen, cyano, nitro, or substituted alkyl, alkoxy, alkylsulfonyl, amino, aryl, etc. comprises the treatment of benzimidazole derivative of formula II (X1, X2, X3, X4, R3 as above) with compound of formula ACHR1R2 (R1, R2 as above) wherein A represents a specific leaving group. E.g., 5(6)-phenyl-2-trimethyl-1H-benzimidazole and KCO3 and EtOAc are refluxed for 15 min. whereupon chloromethyl Et ether in EtOAc is added and refluxed to give 1-ethoxymethyl-5(6)-phenyl-2-trifluoromethylbenzimidazole as a mixture of 1:1 regioisomers in 71%. Compds. of formula I are shown to be useful as pesticides against a variety of insect pests.

IT 156493-93-5P 156493-94-6P 156493-95-7P 156494-09-6P

RN 156493-93-5 HCAPLUS

CN Benzenesulfonamide, N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & H \\ \hline O & & NH \\ \hline O & & NH \\ \hline O & & NH \\ \hline \end{array}$$

RN 156493-94-6 HCAPLUS

CN Benzenesulfonamide, 2-chloro-N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]-(9CI) (CA INDEX NAME)

RN 156493-95-7 HCAPLUS

CN Benzenesulfonamide, 2-(trifluoromethyl)-N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

RN 156494-09-6 HCAPLUS

CN Benzoic acid, 2-[[[2-(trifluoromethyl)-1H-benzimidazol-5-yl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

L24 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:499774 HCAPLUS

DOCUMENT NUMBER: 121:99774

TITLE: Preparation of substituted benzimidazoles as

protozoacides.

INVENTOR(S): Lunkenheimer, Winfried; Baasner, Bernd; Lieb, Folker;

Haberkorn, Axel

10690708.trn

Page 85

PATENT ASSIGNEE(S):

Bayer A.-G., Germany Ger. Offen., 102 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	TENT	NO.			KIN)	DATE		1	APP	LICATIO	ои ис		DATE	
	DE	4237	 . 617			A1	-	1994	0511	Ī	oe.	1992-42	237617	,	19921106	<
		9348				A1		1994		_		1993-48			19930930	
	AU	6703	17			B2		1996	0711							
	ΕP	5973	04			A1		1994	0518	I	ΞP	1993-13	17243		19931025	<
	ΕP	5973	04			В1		2001	0110							
		R:	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT	', LI, 1	NL, SE	E .		
	ES	2154	641			Т3		2001	0416	I	ES	1993-13	17243	·	19931025	<
	US	5482	956			A		1996	0109	τ	JS	1993-14	46634	•	19931029	<
	JΡ	0621	9946			A2		1994	0809	į.	JΡ	1993-29	96008		19931102	<
	GR	3035	574			Т3		2001	0629	(GR	2001-40	00421		20010314	<
PRIO	RITY	APP	LN.	INFO.	:					I	DΕ	1992-42	237617	A	19921106	
OTHE	R SC	URCE	(S):			MARI	TAS	121:	99774	4						
GI																

$$X^2$$
 X^3
 X^4
 X^1
 X^2
 X^3
 X^4
 X^4
 X^4
 X^4
 X^4
 X^4
 X^4
 X^4

AΒ The benzimidazoles I [X1-4=H,halo,CN,NO2,(un)substituted alkyl, alkoxy, etc.; R=fluoroalkyl;R1=(un)substituted alkyl,dialkoxyphosphonyl, etc.] are prepared as protozoacides. 5(6)-Phenyl-2-trifluoromethyl-1H-benzimidazole (preparation given) was refluxed with chloromethyl Et ether, in K2CO3-containing Et

acetate, to give 1-ethoxymethyl-5(6)-phenyl-2-trifluoromethyl-1Hbenzimidazole. I (not specified) was used for treatment of coccidiosis in chicken.

IT 156493-93-5P 156493-94-6P 156493-95-7P 156494-09-6P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with haloalkyl alkyl ethers)

RN 156493-93-5 HCAPLUS

CN Benzenesulfonamide, N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & H \\ N & & NH \\ Ph-S-NH & & N \\ O & & \end{array}$$

RN 156493-94-6 HCAPLUS

RN 156493-95-7 HCAPLUS

CN Benzenesulfonamide, 2-(trifluoromethyl)-N-[2-(trifluoromethyl)-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

RN 156494-09-6 HCAPLUS

CN Benzoic acid, 2-[[[2-(trifluoromethyl)-1H-benzimidazol-5-yl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

L24 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:120579 HCAPLUS

DOCUMENT NUMBER: 120:120579

TITLE: Dyes comprising thioether macrocycles

INVENTOR(S): Benard, Rejane; Friour, Gerard Amede Desire; Martin,

Didier Jean; Riveccie, Marcel Louis Pierre

PATENT ASSIGNEE(S): Kodak-Pathe, Fr.; Eastman Kodak Co.

10690708.trn Page 87 11:48

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT NO.			KINI)	DATE		API	PLICAT	'ION N	iO.		DATE	
					-									
WO 9	9308505			A1		1993	0429	WO	1992-	EP235	9		19921014	<
	W: JP,	US												
	RW: AT,	BE,	CH,	DE,	DK.	, ES,	FR,	GB, GI	R, IE,	ΙT,	LU,	MC,	NL, SE	
FR 2	2682498			A1		1993	0416	FR	1991-	12942	:		19911015	<
EP 6	508312			A1		1994	0803	EP	1992-	92161	.7		19921014	<
EP 6	508312			В1		1995	0524							
	R: DE,	FR,	GB											
JP (07500926			T2		1995	0126	JP	1992-	50742	0		19921014	<
US S	5500337			Α		1996	0319	US	1994-	21179	0		19940415	<
PRIORITY	APPLN.	INFO.	. :					FR	1991-	12942	:	Α	19911015	
								WO	1992-	EP235	9	W	19921014	

AB Spectral sensitizing polymethine dyes for use in Ag halide photog.

materials comprise ≥1 macrocyclic thioether radicals with ≥1
S atom and ≥1 O atom, each S or O atom being separated from another S
or O atom by an alkylene group comprising ≥2 C atoms. The
sensitizing dyes greatly improve the sensitivity of the photog. materials
while reducing residual dye stain formation.

IT 152843-72-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparing polymethine dye photog. sensitizer)

RN 152843-72-6 HCAPLUS

CN Benzenesulfonamide, 3,4-bis(2-chloroethoxy)-N-(2-methyl-6-benzothiazolyl)-(9CI) (CA INDEX NAME)

L24 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:626030 HCAPLUS

DOCUMENT NUMBER: 107:226030

TITLE: Thermally developable light-sensitive material INVENTOR(S): Kohno, Junichi; Okauchi, Ken; Goto, Sohei; Iwagaki,

Masaru; Komamura, Tawara

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 217 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

10690708.trn Page 88 11:48

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
	70	10070415	TD 1006 207002	-	10060015
EP 218385		19870415	EP 1986-307083		19860915 <
EP 218385	A3	19900321			
EP 218385		19920729			
EP 218385	B2	19970514			
R: DE, FR, GB					
JP 62065035	A2	19870324	JP 1985-205129		19850917 <
JP 04077892	B4	19921209			
JP 62078554	A2	19870410	JP 1985-218769		19851001 <
JP 04027538	B4	19920512			
JP 62090647	A2	19870425	JP 1985-232263		19851017 <
JP 05002220	B4	19930112			
JP 62121452	A2	19870602	ĴР 1985-262177		19851120 <
JP 05088818	B4	19931224			
JP 62123456	A2	19870604	JP 1985-263564		19851122 <
JP 06001364		19940105			1,001111
US 4837141	A	19890606	US 1988-191781		19880503 <
US 5064753	A	19911112	US 1990-576158		19900830 <
PRIORITY APPLN. INFO.:				Α	
				A	
			JP 1985-232263	A	
				A	
			JP 1985-263564	A	
			JP 1985-215948	A	
					19860915
					19870507
GI			US 1989-336216	ВŢ	19890615

HS
$$N-N$$
 $N-N$
 $N-N$

A thermally developable diffusion-transfer light-sensitive image-forming AR material is comprised of ≥1 Ag halide light-sensitive layer and a compound having the general formula R[ZmR1]n (I; R = a residue of a development restrainer; Z = a divalent linkage; R1 = an immobilizing group that is capable of reducing the diffusibility of I or its Ag salt or complex during thermal development; m = 0.1; n = 1-3) as a development restrainer. The image-forming material only produces limited fog during thermal development. Thus, a diffusion-transfer light-sensitive image-forming material prepared from a Ag halide emulsion, a 5-methylbenzotriazole Ag salt dispersion in poly(N-vinylpyrrolidone), a dye-providing composition containing the dye former II, development restrainer III-Bu acrylate copolymer, 2,5-di-tert-octyl-4-hydroxyphenol, and phenylcarbamoylated gelatin, a developer solution containing development accelerator IV, a F-containing surfactant, reducing agent V, and poly(N-vinylpyrrolidone), and other additives [polyethylene qlycol, 3-methylpentane-1,3,5-triol, and taurine-tetrakis(vinylsulfonylmethyl)meth ane reaction products] was coated on a subbed PET support, exposed through a step wedge, superposed with a receptor paper coated with poly(vinyl chloride), and heated at 150° to give a magenta image on the receptor paper with Dmax 2.47 and Dmin 0.06 vs. 2.78 and 1.48, resp., for a control using a known restrainer.

V

ΙI

IT 110802-24-9

RL: USES (Uses)

(diffusion-transfer photothermog. materials containing photosensitive silver halide and)

RN 110802-24-9 HCAPLUS

Na

=> log y COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	198.94	879.67
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-24.00	-24.00

STN INTERNATIONAL LOGOFF AT 11:49:40 ON 24 MAR 2006